Changelog

GaBi Service Pack Update 39 to 40

February 2020

Contents

Introduction

GaBi Service Packs comprise a collection of updates, enhancements or fixes to the following GaBi objects: flows, quantities, units, contacts, interpretations and references/citations. This document provides detailed information on what will be changed/added/deleted with the installation of the Service Packs.

If you need further information or if special questions should arise which have not been adequately described in this document, please feel free to send an e-mail to support@gabi-software.com.

1. Updated environmental quantities

Folder	Quantity
EN 15804 +A1	01 EN15804+A1 Global warming potential (GWP) 02 EN15804+A1 Ozone Depletion Potential (ODP) 03 EN15804+A1 Acidification potential (AP) 04 EN15804+A1 Eutrophication potential (EP) 05 EN15804+A1 Photochemical Ozone Creation Potential (POCP) 06 EN15804+A1 Abiotic depletion potential for non fossil resources (ADPE) 07 EN15804+A1 Abiotic depletion potential for fossil resources (ADPF) 01 EN15804+A1 Use of renewable primary energy (PERE) 02 EN15804+A1 Primary energy resources used as raw materials (PERM) 03 EN15804+A1 Total use of renewable primary energy resources (PERT) 04 EN15804+A1 Use of non-renewable primary energy (PENRE) 05 EN15804+A1 Non-renewable primary energy resources used as raw materials (PENRM) 06 EN15804+A1 Total use of non-renewable primary energy resources (PENRT) 07 EN15804+A1 Input of secondary material (SM)

	08 EN15804+A1 Use of renewable secondary fuels (RSF) 09 EN15804+A1 Use of non renewable secondary fuels (NRSF) 10 EN15804+A1 Use of net fresh water (FW) 01 EN15804+A1 Hazardous waste disposed (HWD) 02 EN15804+A1 Non-hazardous waste disposed (NHWD) 03 EN15804+A1 Radioactive waste disposed (RWD) 04 EN15804+A1 Components for re-use (CRU) 05 EN15804+A1 Materials for Recycling (MFR) 06 EN15804+A1 Material for Energy Recovery (MER) 07 EN15804+A1 Exported electrical energy (EEE) 08 EN15804+A1 Exported thermal energy (EET)
EN 15804 +A2	01 EN15804+A2 Climate Change 02 EN15804+A2 Climate Change (fossil) 03 EN15804+A2 Climate Change (biogenic) 04 EN15804+A2 Climate Change (land use change) 05 EN15804+A2 Ozone depletion 06 EN15804+A2 Acidification terrestrial and freshwater 07 EN15804+A2 Eutrophication freshwater 08 EN15804+A2 Eutrophication marine 09 EN15804+A2 Eutrophication terrestrial 10 EN15804+A2 Photochemical ozone formation - human health 11 EN15804+A2 Resource use, mineral and metals 12 EN15804+A2 Resource use, energy carriers 13 EN15804+A2 Water scarcity 01 EN15804+A2 Use of renewable primary energy (PERE) 02 EN15804+A2 Primary energy resources used as raw materials (PERM) 03 EN15804+A2 Total use of renewable primary energy resources (PERT) 04 EN15804+A2 Use of non-renewable primary energy (PENRE) 05 EN15804+A2 Non-renewable primary energy resources used as raw materials (PENRM) 06 EN15804+A2 Total use of non-renewable primary energy

	resources (PENRT) 07 EN15804+A2 Input of secondary material (SM) 08 EN15804+A2 Use of renewable secondary fuels (RSF) 09 EN15804+A2 Use of non renewable secondary fuels (NRSF) 10 EN15804+A2 Use of net fresh water (FW) 01 EN15804+A2 Hazardous waste disposed (HWD) 02 EN15804+A2 Non-hazardous waste disposed (NHWD) 03 EN15804+A2 Radioactive waste disposed (RWD) 04 EN15804+A2 Components for re-use (CRU) 05 EN15804+A2 Materials for Recycling (MFR) 06 EN15804+A2 Material for Energy Recovery (MER) 07 EN15804+A2 Exported electrical energy (EEE) 08 EN15804+A2 Exported thermal energy (EET) 02 EN15804+A2 Biogenic carbon content in packaging 01 EN15804+A2 Respiratory inorganics 02 EN15804+A2 Ionising radiation - human health 03 EN15804+A2 Ecotoxicity freshwater 04 EN15804+A2 Cancer human health effects 05 EN15804+A2 Non-cancer human health effects 06 EN15804+A2 Land Use EN15804 Cancer human health effects (Inorganic) EN15804 Cancer human health effects (Metal) EN15804 Cancer human health effects (Organic) EN15804 Ecotoxicity freshwater (Inorganic) EN15804 Ecotoxicity freshwater (Metals) EN15804 Ecotoxicity freshwater (Organic) EN15804 Non-cancer human health effects (Inorganic) EN15804 Non-cancer human health effects (Metals) EN15804 Non-cancer human health effects (Organic)

2. Updated flow to quantity conversion factors

We found some inconsistent or missing flow to quantity conversion factors which we fixed or added with GaBi Service Pack 37.

Flow Name	Quantity Name	SP39	SP40
1,1-Methylene bis[4-isocyanato-cyclohexane] [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1,2,3-Propanetriol (Glycerin) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1,2,3-Trimethylbenzene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1,2,4-Trimethylbenzene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1,2-Benzoisothiazolin-3-one [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1,2-Butandiol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1,3,5-Trimethylbenzene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1,3-Dimethylcyclohexane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1,4-Dioxan [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

1-Butanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Butoxypropanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Butylbenzene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Butylene (Vinylacetylene) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Butylpropionate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Ethoxy-2-propanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Ethyl-4-methylcyclohexane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Heptanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Heptene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Hexene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Hydroxy-1,1-diphosphonoethane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Methoxy-2-propanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Methyl-2-pyrrolidone [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

1-Nonene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Octanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Octene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Pentadecane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Pentanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Pentene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Propanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Propylbenzene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Tetradecane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Tridecane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
1-Undecane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-(2-Ethoxyethoxy)-ethanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2,2,3 Trimethylbutane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

2,2,3,3-Tetramethylbutane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2,2,4-Trimethylpentane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2,2,5-Trimethylhexane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2,2-Dimethylbutane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2,3 Dimethylpentane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2,3,3-Trimethyl-1-butene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2,3,4-Trimethylpentane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2,3-Dimethyl-2-butene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2,3-Dimethylbutane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2,3-Dimethylhexane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2,3-Dimethylnapthtalene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2,4-Dimethylheptane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2,4-Dimethylhexane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

2,4-Dimethylpentane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2,4-Dinitrotoluene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2,5-Dimethylhexane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2,6-Diethyloctane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Aminopropanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Butoxy-ethanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Butyltetrahydrofuran [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Ethoxy-ethanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Ethoxyethyl acetate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Ethyl-1-hexanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Ethyl-5,5-dimethyl-1,3-dioxane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Ethylhexyl acetate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Heptene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

2-Hexene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Hydroxyethyl Acrylate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Methoxy-ethanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Methyl-1-butene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Methyl-1-pentene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Methyl-2-butene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Methyl-2-pentene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Methylbutan-1-ol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Methylbutan-2-ol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Methylheptane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Methylhexane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Methylnonane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Methyloctane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

2-Methylpentane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Methylpropanoic acid [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Nitrobenzoic acid [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Octanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
2-Pentene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3,4-Propylheptane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3,5-Diethylheptane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3,5-Diethyltoluene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3,5-Dimethylethylbenzene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3,7-Diethylnonane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3,8 Diethyldecane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3,9-Diethylundecane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3-Carene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

3-Methyl-1-butene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3-Methylbutan-1-ol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3-Methylbutan-2-ol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3-Methylbutanoic acid [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3-Methylheptane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3-Methylhexane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3-Methylpentane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3-Nonene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3-Octanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3-Octene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
3-Pentanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
4-Anilino-3-nitro-N-phenylbenzenesulfonamide [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
4-Ethylheptane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

4-Methylheptane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
5-methyl Chrysene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Acenaphthene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Acetaldehyde (Ethanal) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Acetic acid [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Acetic acid, trifluoro- [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Acetone (dimethyl ketone) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Acetonitrile [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Acetophenone [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Acrolein [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Acrylic acid [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Acrylonitrile [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Albite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0

Alcoholethoxylate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Alcoholethoxysulfate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Alcohols (unspec.) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Alcoholsulfate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Aldehyde (unspecified) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Alkane (unspecified) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Alkene (unspecified) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Allyl chloride [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
alpha-Methyl styrene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
alpha-Methyl tetrahydrofuran [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
alpha-Pinene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Amine oxide [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ammonia [Inorganic emissions to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	21.7	32

Anhydrite (Rock) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Aniline [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Aniline, N,N-dimethyl- [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Anthranilic acid [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Antimonite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Antimony - gold - ore (0.09%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.001176
Apatite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Barite, 15% in crude ore, in ground [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Barium sulphate [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Basalt [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Bauxite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Bentonit clay [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Bentonite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Benzaldehyde [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Benzene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Benzo(b)fluoranthene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Benzotriazole [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
beta-Pinene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Biacetyl [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Biphenyl [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Bis(2-ethylhexyl) adipate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Borax [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
BTEX (Benzene, Toluene, Ethylbenzene, and Xylene), unspecified ratio [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Butadiene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Butane (n-butane) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Butane diamine (Tetramethylenediamine TMDA) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Butanone (methyl ethyl ketone) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Butene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Butenyne (vinyl acetylene) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Butoxypropanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Butoxypropyl acetate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Butyl acrylate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Butyl diglycol acetate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Butylbenzylphthalate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Butylcarbamate, iodopropynyl [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Butylene glycol (butane diol) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Butyraldehyde [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Butyric acid (butane acid) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Butyrolactone [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
C10 Cyclic ketones [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
C10 Ketones [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
C12-14 fatty alcohol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

C5 Cyclic ketones [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
C5 Ketones [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
C6 Cyclic ketones [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
C6 Ketones [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
C7 Cyclic ketones [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
C7 Ketones [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
C8 Cyclic ketones [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
C8 Ketones [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
C9 Cyclic ketones [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
C9 Ketones [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
C9-C10 aromates [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Cadmium ore [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.000157
Calcite, in ground [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Calcium chloride [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0

Calcium Sulphate (CaSO4, ore) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Caprolactam [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Carbon dioxide (biotic) [Inorganic emissions to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	0	0.18
Carbon dioxide [Renewable resources]	Environmental cost of air emissions (UBA, version 3.0, 2018)	0	-0.18
Carbon oxide sulfide (COS) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Carbon, in organic matter, in soil [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Carnallite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Chloramine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Chloroacetic acid [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Chlorosilane, trimethyl- [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Chlorosulfonic acid [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Chromium ore (39%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.00011961
Chromium ore (Cr2O3 30%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	9.303E-5
Chromium ore (Cr2O3 40%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.00011961
Chrysotile [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0

Cinnabar [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
cis-2-Butene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
cis-2-Hexene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
cis-2-Pentene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Clay [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Cobalt ore (0.04%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	6.28E-9
Cobalt ore (0.067%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.0519E-8
Colemanite ore [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Copper - Gold - Ore (1.07% Cu; 0.54 g/t Au) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.000295459
Copper - Gold - Silver - ore (0.51% Cu; 0.6 g/t Au; 1.5 g/t Ag) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	3.9957E-5
Copper - Gold - Silver - ore (1.0% Cu; 0.4 g/t Au; 66 g/t Ag) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.00011238
Copper - Gold - Silver - ore (1.1% Cu; 0.01 g/t Au; 2.86 g/t Ag) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.84968E-5
Copper - Gold - Silver - ore (1.13% Cu; 1.05 g/t Au; 3.72 g/t Ag) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	7.44706E-5
Copper - Gold - Silver - ore (1.16% Cu; 0.002 g/t Au; 1.06 g/t Ag) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	2.32748E-5

Copper - Gold - Silver - ore (1.7% Cu; 0.7 g/t Au; 3.5 g/t Ag) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	6.382E-5
Copper - Molybdenum - Gold - Silver - ore (1.13% Cu; 0.02% Mo; 0.01 g/t Au; 2.86 g/t Ag) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	2.29358E-5
Copper - Silver - ore (3.3% Cu; 5.5 g/t Ag) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	5.17E-5
Copper ore (0.14%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.918E-6
Copper ore (0.2%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	2.74E-6
Copper ore (0.3%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	4.11E-6
Copper ore (1 %) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.37E-5
Copper ore (1.13%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.5481E-5
Copper ore (1.2%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.644E-5
Copper ore (1.28%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.7536E-5
Copper ore (1.3 %) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.781E-5
Copper ore (2%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	2.74E-5
Copper ore (4%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	5.48E-5
Copper ore (sulphidic, 1.1%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.59576E-5
Copper, Cu 0.38%, Au 9.7E-4%, Ag 9.7E-4%, Zn 0.63%, Pb 0.014% [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.00137
Cresol (isomers) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Crotonaldehyde [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Cumene (isopropylbenzene) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Cyanite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Cyanoacetic acid [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Cycloalkanes (unspec.) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Cyclobutane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Cyclohexane (hexahydro benzene) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Cyclohexanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Cyclohexanone [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Cyclohexene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Cyclopentadiene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Cyclopentane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Cyclopentanone [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Cyclopentene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Cyclopropane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Decaline [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Decane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Di(2-ethylhexyl)phthalate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Diacetone alcohol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Diatomite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Dibutyl ether [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dibutyl Maleate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dibutylphthalate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dichlorodimethylsilane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Diethanolamine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Diethyl ether [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Diethylamine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Diethylaminoethanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Diethyldisulfide [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Diethylene glycol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Diethylene glycol mono-n-butyl ether [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Diethylketone [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Diethylphthalate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dihexylphthalate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Diisodecylphthalate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Di-isononyl phthalate (DINP) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Diisooctylphthalate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Diisopropylether [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dimethoxy methane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Dimethyl adipate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dimethyl carbonate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dimethyl glutarate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dimethyl malonate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dimethyl phthalate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dimethyl succinate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dimethylamine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dimethyldichlorosilane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dimethyldisulfid [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dimethylphosphorodithioate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dimethylsulfid [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dimethylthiophosphate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dioctylphthalate (DOP) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Diphenylmethane-4,4 di-isocyanate (MDI) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dipropylamine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dipropyleneglycolmethyleether [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dipropylthiocarbamic acid S-ethyl ester [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Disulfoton [Pesticides to fresh water]	CML2001 - Apr. 2013, Terrestric Ecotoxicity Potential (TETP inf.)	0.001209359	0.00120935943422905
Disulfoton [Pesticides to fresh water]	CML2001 - Apr. 2015, Terrestric Ecotoxicity Potential (TETP inf.)	0.001209359	0.00120935943422905
Disulfoton [Pesticides to fresh water]	CML2001 - Dec. 07, Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.)	-	63513.0149472524
Disulfoton [Pesticides to fresh water]	CML2001 - Dec. 07, Human Toxicity Potential (HTP inf.)	-	344.91718873888
Disulfoton [Pesticides to fresh water]	CML2001 - Dec. 07, Marine Aquatic Ecotoxicity Pot. (MAETP inf.)	-	120.613010278747
Disulfoton [Pesticides to fresh water]	CML2001 - Dec. 07, Terrestric Ecotoxicity Potential (TETP inf.)	-	0.00120935943422905
Disulfoton [Pesticides to fresh water]	CML2001 - Jan. 2016, Terrestric Ecotoxicity Potential (TETP inf.)	0.001209359	0.00120935943422905
Disulfoton [Pesticides to fresh water]	CML2001 - Nov. 09, Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.)	-	63513.0149472524
Disulfoton [Pesticides to fresh water]	CML2001 - Nov. 09, Human Toxicity Potential (HTP inf.)	-	344.91718873888

Disulfoton [Pesticides to fresh water]	CML2001 - Nov. 09, Marine Aquatic Ecotoxicity Pot. (MAETP inf.)	-	120.613010278747
Disulfoton [Pesticides to fresh water]	CML2001 - Nov. 09, Terrestric Ecotoxicity Potential (TETP inf.)	-	0.00120935943422905
Disulfoton [Pesticides to fresh water]	CML2001 - Nov. 2010, Terrestric Ecotoxicity Potential (TETP inf.)	0.001209359	0.00120935943422905
Disulfoton [Pesticides to fresh water]	CML2001, Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.)	-	63513.0149472524
Disulfoton [Pesticides to fresh water]	CML2001, Human Toxicity Potential (HTP inf.)	-	344.91718873888
Disulfoton [Pesticides to fresh water]	CML2001, Marine Aquatic Ecotoxicity Pot. (MAETP inf.)	-	120.613010278747
Disulfoton [Pesticides to fresh water]	CML2001, Terrestric Ecotoxicity Potential (TETP inf.)	-	0.00120935943422905
Disulfoton [Pesticides to fresh water]	EF 2.0 Non-cancer human health effects	-	0.000295
Disulfoton [Pesticides to fresh water]	EF 3.0 Non-cancer human health effects	-	0.00035973
Disulfoton [Pesticides to fresh water]	EF 3.0 Non-cancer human health effects (Organic)	-	0.00035973
Disulfoton [Pesticides to fresh water]	EPS 2015d_6.5.1 Other emissions to fresh water: Pesticides to fresh water	-	0
Disulfoton [Pesticides to fresh water]	EPS 2015dx_6.5.1 Other emissions to fresh water: Pesticides to fresh water	-	0
Disulfoton [Pesticides to fresh water]	Human toxicity midpoint, non-cancer effects (v1.06)	-	0.000295403732350508

Disulfoton [Pesticides to fresh water]	Human toxicity midpoint, non-cancer effects (v1.09)	-	0.000295403732350508
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Endpoint (E) - Freshwater ecotoxicity	-	5.2E-8
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Endpoint (E) - Human toxicity	-	0.0002
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Endpoint (E) - Marine ecotoxicity	-	8.7E-11
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Endpoint (E) - Terrestrial ecotoxicity	-	9.9E-11
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Endpoint (H) - Freshwater ecotoxicity	-	5.2E-8
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Endpoint (H) - Human toxicity	-	0.0002
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Endpoint (H) - Marine ecotoxicity	-	8.7E-11
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Endpoint (H) - Terrestrial ecotoxicity	-	9.9E-11
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Endpoint (I) - Freshwater ecotoxicity	-	5.2E-8
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Endpoint (I) - Human toxicity	-	0.0002
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Endpoint (I) - Marine ecotoxicity	-	8.7E-11
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Endpoint (I) - Terrestrial ecotoxicity	-	9.9E-11

Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Midpoint (E) - Freshwater ecotoxicity	-	60
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Midpoint (E) - Human toxicity	-	290
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Midpoint (E) - Marine ecotoxicity	-	0.49
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Midpoint (E) - Terrestrial ecotoxicity	-	0.00066
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Midpoint (H) - Freshwater ecotoxicity	-	60
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Midpoint (H) - Human toxicity	-	290
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Midpoint (H) - Marine ecotoxicity	-	0.49
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Midpoint (H) - Terrestrial ecotoxicity	-	0.00066
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Midpoint (I) - Freshwater ecotoxicity	-	60
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Midpoint (I) - Human toxicity	-	290
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Midpoint (I) - Marine ecotoxicity	-	0.49
Disulfoton [Pesticides to fresh water]	ReCiPe 1.08 Midpoint (I) - Terrestrial ecotoxicity	-	0.00066
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Endpoint (E) - Freshwater ecotoxicity	-	1.3671E-7

Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Endpoint (E) - Human toxicity, non-cancer	-	0.000347353
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Endpoint (E) - Marine ecotoxicity	-	1.13806E-9
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Endpoint (E) - Terrestrial ecotoxicity	-	2.04143E-10
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Endpoint (H) - Freshwater ecotoxicity	-	1.3671E-7
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Endpoint (H) - Human toxicity, non-cancer	-	0.000347353
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Endpoint (H) - Marine ecotoxicity	-	1.13806E-9
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Endpoint (H) - Terrestrial ecotoxicity	-	2.04143E-10
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Endpoint (I) - Freshwater ecotoxicity	-	1.3666E-7
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Endpoint (I) - Human toxicity, non-cancer	-	0.000347353
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Endpoint (I) - Marine ecotoxicity	-	1.14414E-9
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Endpoint (I) - Terrestrial ecotoxicity	-	2.04143E-10
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Midpoint (E) - Freshwater ecotoxicity	-	196.7051024
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Midpoint (E) - Human toxicity, non-cancer	-	1523.479561

Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Midpoint (E) - Marine ecotoxicity	-	10.83862159
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Midpoint (E) - Terrestrial ecotoxicity	-	17.90731439
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Midpoint (H) - Freshwater ecotoxicity	-	196.7051025
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Midpoint (H) - Human toxicity, non-cancer	-	1523.479561
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Midpoint (H) - Marine ecotoxicity	-	10.83862166
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Midpoint (H) - Terrestrial ecotoxicity	-	17.90731439
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Midpoint (I) - Freshwater ecotoxicity	-	196.6324704
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Midpoint (I) - Human toxicity, non-cancer	-	1523.479538
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Midpoint (I) - Marine ecotoxicity	-	10.89653714
Disulfoton [Pesticides to fresh water]	ReCiPe 2016 v1.1 Midpoint (I) - Terrestrial ecotoxicity	-	17.90731434
Disulfoton [Pesticides to fresh water]	TRACI 2.0, Ecotoxicity Air	662695.0913	-
Disulfoton [Pesticides to fresh water]	TRACI 2.0, Ecotoxicity Water	-	662695.0913
Disulfoton [Pesticides to fresh water]	TRACI 2.0, Human Health Non Cancer Air	0.000295404	-

Disulfoton [Pesticides to fresh water]	TRACI 2.0, Human Health Non Cancer Water	-	0.000295404
Disulfoton [Pesticides to fresh water]	TRACI 2.1, Human toxicity, non-canc. (recommended)	0.000295404	0.000295403732350508
Disulfoton [Pesticides to fresh water]	TRACI, Ecotoxcity Water	-	2729.880964
Disulfoton [Pesticides to fresh water]	TRACI, Human Health Non Cancer Water	-	5072.31057400001
Disulfoton [Pesticides to fresh water]	USEtox 2.01, Ecotoxicity (recommended and interim)	-	663739.5313
Disulfoton [Pesticides to fresh water]	USEtox 2.01, Ecotoxicity (recommended only)	-	663739.5313
Disulfoton [Pesticides to fresh water]	USEtox 2.01, Human toxicity, non-canc. (recommended and interim)	-	0.000276782
Disulfoton [Pesticides to fresh water]	USEtox 2.01, Human toxicity, non-canc. (recommended only)	-	0.000276782
Disulfoton [Pesticides to fresh water]	USEtox 2.1, Ecotoxicity (recommended and interim)	-	663739.5175
Disulfoton [Pesticides to fresh water]	USEtox 2.1, Ecotoxicity (recommended only)	-	663739.5175
Disulfoton [Pesticides to fresh water]	USEtox 2.1, Human toxicity, non-canc. (recommended and interim)	-	0.000276782
Disulfoton [Pesticides to fresh water]	USEtox 2.1, Human toxicity, non-canc. (recommended only)	-	0.000276782
Disulfoton [Pesticides to fresh water]	USEtox, Human toxicity, non-canc. (recommended)	0.000295404	0.000295403732350508

d-Limonene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dodecane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Dolomite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Dust (combustion) [Particles to air]	CML2001 - Apr. 2013, Human Toxicity Potential (HTP inf.)	-	0.82
Dust (combustion) [Particles to air]	CML2001 - Apr. 2015, Human Toxicity Potential (HTP inf.)	-	0.82
Dust (combustion) [Particles to air]	CML2001 - Dec. 07, Human Toxicity Potential (HTP inf.)	-	0.82
Dust (combustion) [Particles to air]	CML2001 - Jan. 2016, Human Toxicity Potential (HTP inf.)	-	0.82
Dust (combustion) [Particles to air]	CML2001 - Nov. 09, Human Toxicity Potential (HTP inf.)	-	0.82
Dust (combustion) [Particles to air]	CML2001 - Nov. 2010, Human Toxicity Potential (HTP inf.)	-	0.82
Dust (combustion) [Particles to air]	CML2001, Human Toxicity Potential (HTP inf.)	-	0.82
Dust (combustion) [Particles to air]	EI95, Winter smog	-	1
Dust (combustion) [Particles to air]	EI99, EA, Human health, Respiratory (inorganic)	-	0.000375
Dust (combustion) [Particles to air]	EI99, HA, Human health, Respiratory (inorganic)	-	0.000375

Dust (combustion) [Particles to air]	EI99, IA, Human health, Respiratory (inorganic)	-	0.000274
Dust (combustion) [Particles to air]	Environmental cost of air emissions (UBA, version 3.0, 2019)	-	41.2
Dust (combustion) [Particles to air]	EPS 2015d_5.5 Particles to air	-	51.37391216
Dust (combustion) [Particles to air]	EPS 2015dx_5.5 Particles to air	-	51.37391216
Dust (combustion) [Particles to air]	I02+ v2.1 - Respiratory effects - Midpoint	-	0.535714286
Dust (combustion) [Particles to air]	Particulate matter/Respiratory inorganics midpoint (v1.06)	-	0.227777778
Dust (combustion) [Particles to air]	Particulate matter/Respiratory inorganics midpoint (v1.09)	-	0.227777778
Dust (combustion) [Particles to air]	ReCiPe 1.07 Endpoint (H) - Particulate matter formation	-	0.00026
Dust (combustion) [Particles to air]	ReCiPe 1.07 Midpoint (H) - Particulate matter formation	-	1
Dust (combustion) [Particles to air]	ReCiPe 1.08 Endpoint (E) - Particulate matter formation	-	0.00026
Dust (combustion) [Particles to air]	ReCiPe 1.08 Endpoint (H) - Particulate matter formation	-	0.00026
Dust (combustion) [Particles to air]	ReCiPe 1.08 Endpoint (I) - Particulate matter formation	-	0.00026
Dust (combustion) [Particles to air]	ReCiPe 1.08 Midpoint (E) - Particulate matter formation	-	1

Dust (combustion) [Particles to air]	ReCiPe 1.08 Midpoint (H) - Particulate matter formation	-	1
Dust (combustion) [Particles to air]	ReCiPe 1.08 Midpoint (I) - Particulate matter formation	-	1
Dust (combustion) [Particles to air]	TRACI 2.0, Human Health Criteria Air	-	1
Dust (combustion) [Particles to air]	TRACI, Human Health Criteria Air-Point Source	-	0.599999999999999
Dust (combustion) [Particles to air]	UBP, Ecological scarcity method	-	110000
Dust (PM2.5 - PM10) [Particles to air]	CML2001 - Apr. 2013, Human Toxicity Potential (HTP inf.)	0.82	0
Dust (PM2.5 - PM10) [Particles to air]	CML2001 - Apr. 2015, Human Toxicity Potential (HTP inf.)	0.82	0
Dust (PM2.5 - PM10) [Particles to air]	CML2001 - Dec. 07, Human Toxicity Potential (HTP inf.)	0.82	0
Dust (PM2.5 - PM10) [Particles to air]	CML2001 - Jan. 2016, Human Toxicity Potential (HTP inf.)	0.82	0
Dust (PM2.5 - PM10) [Particles to air]	CML2001 - Nov. 09, Human Toxicity Potential (HTP inf.)	0.82	0
Dust (PM2.5 - PM10) [Particles to air]	CML2001 - Nov. 2010, Human Toxicity Potential (HTP inf.)	0.82	0
Dust (PM2.5 - PM10) [Particles to air]	CML2001, Human Toxicity Potential (HTP inf.)	0.82	0
Dust (PM2.5 - PM10) [Particles to air]	EDIP 1997, Human toxicity air	20000000	0
Dust (PM2.5 - PM10) [Particles to air]	EI99, EA, Human health, Respiratory (inorganic)	0.000375	0

Dust (PM2.5 - PM10) [Particles to air]	EI99, HA, Human health, Respiratory (inorganic)	0.000375	0
Dust (PM2.5 - PM10) [Particles to air]	EI99, IA, Human health, Respiratory (inorganic)	0.000274	0
Dust (PM2.5 - PM10) [Particles to air]	EPS 2015d_5.5 Particles to air	70.14918065	0
Dust (PM2.5 - PM10) [Particles to air]	EPS 2015dx_5.5 Particles to air	70.14918065	0
Dust (PM2.5 - PM10) [Particles to air]	I02+ v2.1 - Respiratory effects - Midpoint	0.535714286	0
Dust (PM2.5 - PM10) [Particles to air]	NF EN 15804, Air pollution	25000	0
Dust (PM2.5 - PM10) [Particles to air]	Particulate matter/Respiratory inorganics midpoint (v1.06)	0.6	0
Dust (PM2.5 - PM10) [Particles to air]	TRACI 2.0, Human Health Criteria Air	1.666666671	0
Dust (PM2.5 - PM10) [Particles to air]	TRACI 2.1, Human Health Particulate Air	1	0
Dust (PM2.5 - PM10) [Particles to air]	TRACI, Human Health Criteria Air-Point Source	0.599999999999999	0
Ester (unspec.) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethene (ethylene) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Ether (unspec.) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethine (acetylene) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethyl acetylen [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethyl acrylate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethyl benzene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethyl butyrate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethyl cyclohexane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethyl cyclopentane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethyl isopropyl ether [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethylamine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethylene acetate (ethyl acetate) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethylene glycol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethylene oxide [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Ethylenediamine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethylenediaminetetraacetic acid (EDTA) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethylthioethane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Ethyl-trans-butyl ether [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Europium, 0.06% in bastnasite, 0.006% [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Fatty methylester [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Feldspar (aluminium silicates) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Ferro manganese [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	2.11344E-6
Fluoranthene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Fluorene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Fluorides [Inorganic emissions to air]	EDIP 1997, Human toxicity air	95238000	95238095.238095
Fluorides [Inorganic emissions to air]	EDIP 1997, Human toxicity soil	976	976.0036746
Fluorides [Inorganic emissions to air]	EDIP 1997, Human toxicity water	2.4733	2.47333
Fluorides [Inorganic emissions to air]	EPS 2015d_5.2 Inorganic emissions to air	-	0

Fluorides [Inorganic emissions to air]	EPS 2015dx_5.2 Inorganic emissions to air	-	0
Fluorspar (calcium fluoride; fluorite) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Formaldehyde (methanal) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Formamide [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Formic acid (methane acid) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Fresh water to turbine, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water to turbine, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Fresh water to turbine, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, extreme scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, extreme scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Fresh water, extreme scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, high scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, high scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001

Fresh water, high scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, low scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, low scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Fresh water, low scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, medium scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, medium scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Fresh water, medium scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, moderate scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, moderate scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Fresh water, moderate scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, OECD average scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, OECD average scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Fresh water, OECD average scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001

Fresh water, regionalized, AR [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, AR [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, AT [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, AT [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, AU [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, AU [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, BA [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, BA [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, BD [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, BD [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, BE [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, BE [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, BG [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001

Fresh water, regionalized, BG [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, BR [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, BR [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, CA [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, CA [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, CH [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, CH [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, CI [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, CI [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, CL [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, CL [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, CN [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, CN [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001

Fresh water, regionalized, CO [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, CO [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, CZ [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, CZ [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, DE [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, DE [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, DK [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, DK [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, EE [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, EE [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, ES [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, ES [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, FI [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001

Fresh water, regionalized, FI [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, FR [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, FR [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, GB [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, GB [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, GR [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, GR [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, HU [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, HU [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, ID [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, ID [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, IE [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, IE [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001

Fresh water, regionalized, IN [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, IN [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, IS [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, IS [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, IT [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, IT [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, JP [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, JP [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, KR [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, KR [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, KZ [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, KZ [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, LK [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001

Fresh water, regionalized, LK [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, LT [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, LT [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, LU [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, LU [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, LV [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, LV [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, MK [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, MK [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, MX [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, MX [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, MY [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, MY [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001

Fresh water, regionalized, NG [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, NG [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, NL [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, NL [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, NO [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, NO [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, NZ [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, NZ [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, PH [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, PH [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, PK [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, PK [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, PL [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001

Fresh water, regionalized, PL [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, PT [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, PT [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, RO [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, RO [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, RS [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, RS [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, RU [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, RU [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Fresh water, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, SE [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001

Fresh water, regionalized, SE [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, SG [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, SG [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, SI [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, SI [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, SK [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, SK [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, SL [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, SL [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, TH [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, TH [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, TR [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, TR [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001

Fresh water, regionalized, UA [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, UA [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, US [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, US [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, UZ [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, UZ [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, VE [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, VE [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, VN [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, VN [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, regionalized, ZA [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Fresh water, regionalized, ZA [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Fresh water, very high scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001

Fresh water, very high scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Fresh water, very high scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Furan [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Furfuryl alcohol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Gadolinium, 0.15% in bastnasite, 0.015% [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Glyoxal [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Gold deposit (1ppm) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	5.2E-5
Granite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Graphite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Gravel [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Ground water, extreme scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Ground water, extreme scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Ground water, extreme scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Ground water, high scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001

Ground water, high scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Ground water, high scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Ground water, low scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Ground water, low scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Ground water, low scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Ground water, medium scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Ground water, medium scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Ground water, medium scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Ground water, moderate scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Ground water, moderate scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Ground water, moderate scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Ground water, OECD average scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Ground water, OECD average scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001

Ground water, OECD average scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Ground water, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Ground water, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Ground water, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Ground water, very high scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Ground water, very high scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Ground water, very high scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Gypsum (natural gypsum) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Heavy spar (BaSO4) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Helium, 0.08% in natural gas [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Heptane (isomers) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Hexadecane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Hexafluoroisopropanole [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Hexamethyldisilizane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Hexamethylene diamine (HMDA) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Hexamethylene diisocyanate (HDI) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Hexan-2-one [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Hexan-3-one [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Hexane (isomers) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Hexylcyclohexane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
High radioactive waste [Radioactive waste]	Cost	-	0
Hydrocarbons, aromatic [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
IC BGA 1515 (14.6g) 40x40 mm [Components]	Electronics (unspecified)	-	0.0146
IC BGA 1515 (14.6g) 40x40 mm [Components]	Mass	-	0.0146
IC BGA 672 (6.6g) 27 x 27 [Components]	Copper in alloy (E)	0.003839561	0.00302
IC BGA 672 (6.6g) 27 x 27 [Components]	Electronics (unspecified)	4.361E-5	0.00655333
IC BGA 672 (6.6g) 27 x 27 [Components]	Epoxy resin (E)	0.000121024	1.4E-5
IC BGA 672 (6.6g) 27 x 27 [Components]	Glass fibers (E)	0.000387686	-
IC BGA 672 (6.6g) 27 x 27 [Components]	Gold (E)	-	5.74E-6
IC BGA 672 (6.6g) 27 x 27 [Components]	Lead (E)	-	0.000246

IC BGA 672 (6.6g) 27 x 27 [Components]	Mass	0.006577	0.00655333
IC BGA 672 (6.6g) 27 x 27 [Components]	Nickel (E)	-	1.67E-5
IC BGA 672 (6.6g) 27 x 27 [Components]	Silicon dioxide (SiO2) (E)	-	0.000135
IC BGA 672 (6.6g) 27 x 27 [Components]	Tin (E)	0.000431756	0.000465
IC BGA 672 (6.6g) 27 x 27 [Components]	Zinc (E)	1.59E-5	-
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (14 nm node) [Components]	Carbon black (E)	5.04E-7	1.98E-7
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (14 nm node) [Components]	Copper in alloy (E)	0.00011268	5.96E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (14 nm node) [Components]	Electronics (unspecified)	0.000403	0.0002089
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (14 nm node) [Components]	Epoxy resin (E)	5.1291E-5	1.15E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (14 nm node) [Components]	Glass fibers (E)	-	3.01E-6
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (14 nm node) [Components]	Gold (E)	5.635E-7	4.13E-7
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (14 nm node) [Components]	Lead (E)	-	3.26E-6
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (14 nm node) [Components]	Mass	0.000403	0.000209
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (14 nm node) [Components]	Nickel (E)	3.57E-6	2.53E-6

IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (14 nm node) [Components]	Palladium in alloy (E)	5E-10	-
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (14 nm node) [Components]	Silicon (E)	1.53E-5	0
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (14 nm node) [Components]	Silicon dioxide (SiO2) (E)	0.00020327	2.54E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (14 nm node) [Components]	Silver (E)	4.8E-7	3.22E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (14 nm node) [Components]	Tin in alloy (E)	1.54E-5	3.54E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (14 nm node) [Components]	Zinc in alloy (E)	4.11E-8	-
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Acrylic resin (E)	-	0
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Carbon black (E)	5.04E-7	1.98E-7
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Copper in alloy (E)	0.00011268	5.96E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Electronics (unspecified)	0.000403	0.0002089
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Epoxy resin (E)	5.1291E-5	1.15E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Glass fibers (E)	-	3.01E-6
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Gold (E)	5.635E-7	4.13E-7

IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Lead (E)	-	3.26E-6
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Mass	0.000403	0.000209
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Nickel (E)	3.57E-6	2.53E-6
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Palladium in alloy (E)	5E-10	-
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Phenol-Formaldehyde-Resin (PF) (E)	-	0
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Silicon (E)	1.53E-5	2.54E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Silicon dioxide (SiO2) (E)	0.00020327	3.22E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Silver (E)	4.8E-7	3.54E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Tin in alloy (E)	1.54E-5	3.54E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node) [Components]	Zinc in alloy (E)	4.11E-8	-
IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Acrylic resin (E)	0	-
IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Carbon black (E)	5.04E-7	1.98E-7
IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Copper in alloy (E)	0.00011268	5.96E-5

IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Electronics (unspecified)	0.000403	0.0002089
IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Epoxy resin (E)	5.1291E-5	1.15E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Glass fibers (E)	0	3.01E-6
IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Gold (E)	5.635E-7	4.13E-7
IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Lead (E)	-	3.26E-6
IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Mass	0.000403	0.000209
IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Nickel (E)	3.57E-6	2.53E-6
IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Palladium in alloy (E)	5E-10	-
IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Phenol-Formaldehyde-Resin (PF) (E)	0	-
IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Silicon (E)	1.53E-5	2.54E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Silicon dioxide (SiO2) (E)	0.00020327	3.22E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Silver (E)	4.8E-7	3.54E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Tin in alloy (E)	1.54E-5	3.54E-5

IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node) [Components]	Zinc in alloy (E)	4.11E-8	-
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Acrylic resin (E)	0	-
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Carbon black (E)	5.04E-7	1.98E-7
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Copper in alloy (E)	0.00011268	5.96E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Electronics (unspecified)	0.000403	0.0002089
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Epoxy resin (E)	5.1291E-5	1.15E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Glass fibers (E)	0	3.01E-6
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Gold (E)	5.635E-7	4.13E-7
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Lead (E)	-	3.26E-6
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Mass	0.000403	0.000209
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Nickel (E)	3.57E-6	2.53E-6
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Palladium in alloy (E)	5E-10	-
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Phenol-Formaldehyde-Resin (PF) (E)	0	-

IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Silicon (E)	1.53E-5	2.54E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Silicon dioxide (SiO2) (E)	0.00020327	3.22E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Silver (E)	4.8E-7	3.54E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Tin in alloy (E)	1.54E-5	3.54E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node) [Components]	Zinc in alloy (E)	4.11E-8	-
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Acrylic resin (E)	0	-
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Carbon black (E)	5.04E-7	1.98E-7
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Copper in alloy (E)	0.00011268	5.96E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Electronics (unspecified)	0.000403	0.0002089
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Epoxy resin (E)	5.1291E-5	1.15E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Glass fibers (E)	0	3.01E-6
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Gold (E)	5.635E-7	4.13E-7
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Lead (E)	-	3.26E-6

IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Mass	0.000403	0.000209
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Nickel (E)	3.57E-6	2.53E-6
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Palladium in alloy (E)	5E-10	-
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Phenol-Formaldehyde-Resin (PF) (E)	0	-
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Silicon (E)	1.53E-5	2.54E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Silicon dioxide (SiO2) (E)	0.00020327	3.22E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Silver (E)	4.8E-7	3.54E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Tin in alloy (E)	1.54E-5	3.54E-5
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node) [Components]	Zinc in alloy (E)	4.11E-8	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (14 nm node) [Components]	Carbon black (E)	8.67E-7	1.32E-7
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (14 nm node) [Components]	Copper in alloy (E)	0.000125551	0
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (14 nm node) [Components]	Electronics (unspecified)	0.000736207	0.004775915
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (14 nm node) [Components]	Epoxy resin (E)	9.96436E-5	9.60100000000002E-7

IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (14 nm node) [Components]	Gold (E)	5.67E-6	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (14 nm node) [Components]	Mass	0.000736207	0.004775915
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (14 nm node) [Components]	Nickel (E)	1.3E-5	3.22E-5
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (14 nm node) [Components]	Silicon (E)	3.05E-5	0.000183025
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (14 nm node) [Components]	Silicon dioxide (SiO2) (E)	0.000309126	6.33000000000002E-6
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (14 nm node) [Components]	Silver (E)	6.85E-6	1.49925E-5
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (14 nm node) [Components]	Tin in alloy (E)	0.000145	0.0005
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Acrylic resin (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Barium sulfate (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Carbon black (E)	8.67E-7	1.32E-7
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Copper in alloy (E)	0.000125551	0
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Electronics (unspecified)	0.000736	0.004775915
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Epoxy resin (E)	9.96436E-5	9.60100000000002E-7

IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Glass fibers (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Gold (E)	5.67E-6	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Mass	0.000736	0.004775915
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Nickel (E)	1.3E-5	3.22E-5
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Phenol-Formaldehyde-Resin (PF) (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Polyimide (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Polyurethane (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Silicon (E)	3.05E-5	0.000183025
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Silicon dioxide (SiO2) (E)	0.000309126	6.33000000000002E-6
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Silver (E)	6.85E-6	1.49925E-5
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node) [Components]	Tin in alloy (E)	0.000145	0.0005
IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Acrylic resin (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Barium sulfate (E)	0	-

IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Carbon black (E)	8.67E-7	1.32E-7
IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Copper in alloy (E)	0.000125551	0
IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Electronics (unspecified)	0.000736	0.004775915
IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Epoxy resin (E)	9.96436E-5	9.60100000000002E-7
IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Glass fibers (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Gold (E)	5.67E-6	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Mass	0.000736	0.004775915
IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Nickel (E)	1.3E-5	3.22E-5
IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Phenol-Formaldehyde-Resin (PF) (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Polyimide (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Polyurethane (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Silicon (E)	3.05E-5	0.000183025
IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Silicon dioxide (SiO2) (E)	0.000309126	6.33000000000002E-6

IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Silver (E)	6.85E-6	1.49925E-5
IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node) [Components]	Tin in alloy (E)	0.000145	0.0005
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Acrylic resin (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Barium sulfate (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Carbon black (E)	8.67E-7	1.32E-7
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Copper in alloy (E)	0.000125551	0
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Electronics (unspecified)	0.000736	0.004775915
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Epoxy resin (E)	9.96436E-5	9.60100000000002E-7
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Glass fibers (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Gold (E)	5.67E-6	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Mass	0.000736	0.004775915
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Nickel (E)	1.3E-5	3.22E-5
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Phenol-Formaldehyde-Resin (PF) (E)	0	-

IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Polyimide (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Polyurethane (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Silicon (E)	3.05E-5	0.000183025
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Silicon dioxide (SiO2) (E)	0.000309126	6.33000000000002E-6
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Silver (E)	6.85E-6	1.49925E-5
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node) [Components]	Tin in alloy (E)	0.000145	0.0005
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Acrylic resin (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Barium sulfate (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Carbon black (E)	8.67E-7	1.32E-7
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Copper in alloy (E)	0.000125551	0
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Electronics (unspecified)	0.000736	0.004775915
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Epoxy resin (E)	9.96436E-5	9.60100000000002E-7
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Glass fibers (E)	0	-

IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Gold (E)	5.67E-6	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Mass	0.000736	0.004775915
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Nickel (E)	1.3E-5	3.22E-5
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Phenol-Formaldehyde-Resin (PF) (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Polyimide (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Polyurethane (E)	0	-
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Silicon (E)	3.05E-5	0.000183025
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Silicon dioxide (SiO2) (E)	0.000309126	6.33000000000002E-6
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Silver (E)	6.85E-6	1.49925E-5
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node) [Components]	Tin in alloy (E)	0.000145	0.0005
IC WLP CSP 49 (10.2mg) (3.17x3.17x0.55mm) CMOS logic (22 nm node) [Components]	Acrylic resin (E)	-	0
IC WLP CSP 49 (10.2mg) (3.17x3.17x0.55mm) CMOS logic (22 nm node) [Components]	Methanol (E)	-	0
IC WLP CSP 49 (10.2mg) (3.17x3.17x0.55mm) CMOS logic (22 nm node) [Components]	Methylacrylate (E)	-	0

IC WLP CSP 49 (10.2mg) (3.17x3.17x0.55mm) CMOS logic (22 nm node) [Components]	Nickel (E)	-	0
IC WLP CSP 49 (10.2mg) (3.17x3.17x0.55mm) CMOS logic (22 nm node) [Components]	n-Methyl-2-pyrrolidone (E)	-	0
IC WLP CSP 49 (10.2mg) (3.17x3.17x0.55mm) CMOS logic (22 nm node) [Components]	Polyimide (E)	-	0
IC WLP CSP 49 (10.2mg) (3.17x3.17x0.55mm) CMOS logic (22 nm node) [Components]	Silver (E)	-	0
IC WLP CSP 49 (10.2mg) (3.17x3.17x0.55mm) CMOS logic (22 nm node) [Components]	Titanium (E)	-	0
IC WLP CSP 49 (10.2mg) (3.17x3.17x0.55mm) CMOS logic (22 nm node) [Components]	Tungsten in alloy (E)	-	0
Ilmenite (titanium ore) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	8.37E-9
Indan [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Inert rock [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Insulation glass composite [Building industry]	Mass	15	20.5
Iron ore (56.86%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	2.97946E-8
Iron ore (65%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	3.406E-8
iso-Amyl-iso-butyrate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
iso-Butane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

iso-Butanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
iso-Butene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
iso-Butyl acetate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
iso-Butyl isobutyrate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
iso-Butyraldehyde [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
iso-Pentane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
iso-Pentylacetate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Isophorone [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Isoprene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Isopropanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
iso-Propyl acetate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
iso-Propyl propionate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Isopropylamine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Kaolin ore [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Kaolinite (24% in ore as mined) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Kieserite (25% in ore as mined) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Lactic acid [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Lake water to turbine, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Lake water to turbine, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Lake water to turbine, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Lake water, extreme scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Lake water, extreme scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Lake water, extreme scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Lake water, high scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Lake water, high scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Lake water, high scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Lake water, low scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001

Lake water, low scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Lake water, low scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Lake water, medium scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Lake water, medium scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Lake water, medium scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Lake water, moderate scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Lake water, moderate scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Lake water, moderate scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Lake water, OECD average scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Lake water, OECD average scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Lake water, OECD average scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Lake water, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Lake water, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001

Lake water, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Lake water, very high scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
Lake water, very high scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
Lake water, very high scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Lauramide DEA [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Lava [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Lead - Zinc - Silver - ore (5.49% Pb; 12.15% Zn; 57.4 gpt Ag) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.000481165
Lead - zinc ore (4.6%-0.6%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.000294868
Lead ore (5%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.000317
Lead, Pb 0.014%, Au 9.7E-4%, Ag 9.7E-4%, Zn 0.63%, Cu 0.38% [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.00634
Limestone (calcium carbonate) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Lithium chloride solution [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	3.675E-8
Lithium ore (3%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	3.45E-7
Magnesit (Magnesium carbonate) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Magnesite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Magnesium chloride [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0

Magnesium chloride leach (40%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Magnesium ore [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Maleic acid [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Maleic anhydride [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Manganese ore (43%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.0922E-6
Manganese ore (45%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.14427E-6
Manganese ore (R.O.M.) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.14427E-6
Manganese ore [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.14427E-6
Medium radioactive wastes [Radioactive waste]	Cost	482907.172786888	0
Mercaptan (unspecified) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
meta-Cresol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
meta-Ethyltoluene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Metallurgical coal [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Metamorphic stone, containing graphite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Methacrolein [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Methacrylate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methacrylic acid [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methane (biotic) [Organic emissions to air (group VOC)]	EF 3.0 Ecotoxicity freshwater	-	0.31974
Methane (biotic) [Organic emissions to air (group VOC)]	EF 3.0 Ecotoxicity freshwater (Organic)	-	0.31974
Methane (biotic) [Organic emissions to air (group VOC)]	EF 3.0 Non-cancer human health effects	-	4.8548E-8
Methane (biotic) [Organic emissions to air (group VOC)]	EF 3.0 Non-cancer human health effects (Organic)	-	4.8548E-8
Methane (biotic) [Organic emissions to air (group VOC)]	Environmental cost of air emissions (UBA, version 3.0, 2018)	0	4.5
Methane (biotic) [Organic emissions to air (group VOC)]	ISO14067 GWP100, Biotic	28	30
Methane [Organic emissions to air (group VOC)]	EF 3.0 Non-cancer human health effects	4.8548E-8	-
Methanesulfonic acid [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methanethiol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl [{dimethoxyphosphinothioyl}thio]acetate (MPEM) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl acetate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Methyl acetylene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl amine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl borate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl cyclohexane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl cyclopentane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl dithiomethane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl formate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl glyoxal [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl isobutyl ketone [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl isobutyrate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl isopropylketone [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl lactate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl methacrylate (MMA) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Methyl nitrite [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl propionate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl propyl Ketone [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl tert-butylether [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methyl tert-butylketone [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Methylvinyl ketone [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Mineral oil (tetradecane) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Molybdenid disulfide (Mo 0.21%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	3.738E-5
Molybdenite (Mo 0.24%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	4.272E-5
Molybdenum ore (0.01%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.78E-5
Molybdenum ore (0.1%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	3.026E-5
Monoethanolamine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
N,N-Dimethyl formamide [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Naphtha [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Natural Aggregate [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Natural pumice [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Natural stone [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
n-Butyl acetate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Neopentane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Nepheline [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Nickel ore (1.2%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	7.836E-7
Nickel ore (1.5%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	9.795E-7
Nickel ore (1.6%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.0448E-6
Nickel ore (2.0%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.306E-6
Nickel ore (2.7%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.7631E-6
Nitrilotriacetate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Nitrobenzene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Nitrogen (N-compounds) [Inorganic emissions to air]	EF 2.0 Eutrophication marine	0.124	0
Nitrogen dioxide [Inorganic emissions to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	14.4	17.93
Nitrogen monoxide [Inorganic emissions to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	14.4	17.93

Nitrogen oxides [Inorganic emissions to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	14.4	17.93
NMVOC (unspecified) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Nonane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
O,O,O,O-Tetraethyl dithiopyrophosphate (TEDP) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
O,O,O-Triethylphosphorothioate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
O,O,O-Trimethyl phosphorothioate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
O,O-Diethyl dithiophosphate (Diethyl phosphorodithioic acid) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
O,O-Diethyl phosphoramidothioate (DEPAT) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
O,O-Dimethyl phosphoramidothioate (DMPAT) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Octaethylene glycol monododecyl ether [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Octane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Octyl cyclohexane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Oil Mist [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Oils, unspecified [Organic emissions to agricultural soil]	EDIP 1997, Ecotoxicity soil chronic	333.29	-
Oils, unspecified [Organic emissions to agricultural soil]	EDIP 1997, Human toxicity soil	0.20766	-
Oils, unspecified [Organic emissions to agricultural soil]	EF 3.0 Ecotoxicity freshwater	-	0.50794
Oils, unspecified [Organic emissions to agricultural soil]	EF 3.0 Ecotoxicity freshwater (Organic)	-	0.50794
Oils, unspecified [Organic emissions to agricultural soil]	EF 3.0 Non-cancer human health effects	-	1.9907E-9
Oils, unspecified [Organic emissions to agricultural soil]	EF 3.0 Non-cancer human health effects (Organic)	-	1.9907E-9
Olivine [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
o-Nitrotoluene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Open Pit extracted ore [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Open Pit Mine Ore [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Ore mined [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
ortho-Cresol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
ortho-Ethyltoluene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Palladium deposit (7ppm) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	3.997E-6
para-Cresol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
para-Ethyltoluene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Paraffin oil [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Peat ecoinvent [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Pentanaldehyde [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Pentane (n-pentane) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Pentanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Perlite (Rhyolithe) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Phenol (hydroxy benzene) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Phonolite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Phosphate (P2O5) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	2.4288E-6
Phosphate (PO3) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	2.1528E-6
Phosphate ore [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	9.936E-8
Phosphonic acid, [nitrilotris{methylene}]tris-, pentasodium salt [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Phosphorus minerals [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	9.936E-8
Phosphorus ore (29% P2O5) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	6.9552E-7
Phosphorus-pent-oxide [Inorganic emissions to air]	EF 3.0 Ecotoxicity freshwater	-	35.749
Phosphorus-pent-oxide [Inorganic emissions to air]	EF 3.0 Ecotoxicity freshwater (Inorganic)	-	35.749

Phosphorus-pent-oxide [Inorganic emissions to sea water]	EF 3.0 Ecotoxicity freshwater	-	3.5379E-10
Phosphorus-pent-oxide [Inorganic emissions to sea water]	EF 3.0 Ecotoxicity freshwater (Inorganic)	-	3.5379E-10
Phthalate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Phthalic anhydride [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Pit gas (in MJ) [Natural gas (resource)]	CML2001 - Apr. 2013, Abiotic Depletion (ADP fossil)	-	1
Pit gas (in MJ) [Natural gas (resource)]	CML2001 - Apr. 2015, Abiotic Depletion (ADP fossil)	-	1
Pit gas (in MJ) [Natural gas (resource)]	CML2001 - Jan. 2016, Abiotic Depletion (ADP fossil)	-	1
Pit gas (in MJ) [Natural gas (resource)]	CML2001 - Nov. 2010, Abiotic Depletion (ADP elements)	-	0
Pit gas (in MJ) [Natural gas (resource)]	CML2001 - Nov. 2010, Abiotic Depletion (ADP fossil)	-	1
Pit gas (in MJ) [Natural gas (resource)]	EF 2.0 Resource use, energy carriers	-	1
Pit gas (in MJ) [Natural gas (resource)]	EF 3.0 Resource use, energy carriers	-	1
Pit gas (in MJ) [Natural gas (resource)]	EPS 2015d_1.4 Non renewable energy resources: Natural gas	-	0.0068628016959685
Pit gas (in MJ) [Natural gas (resource)]	EPS 2015dx_1.4 Non renewable energy resources: Natural gas	-	0.0068628016959685
Pit gas (in MJ) [Natural gas (resource)]	ReCiPe 1.07 Endpoint (H) - Fossil depletion	-	0.0043593345729139

Pit gas (in MJ) [Natural gas (resource)]	ReCiPe 1.07 Midpoint (H) - Fossil depletion	-	0.0264202095324625
Pit gas (in MJ) [Natural gas (resource)]	ReCiPe 1.08 Endpoint (E) - Fossil depletion	-	0.0043593345729139
Pit gas (in MJ) [Natural gas (resource)]	ReCiPe 1.08 Endpoint (H) - Fossil depletion	-	0.0043593345729139
Pit gas (in MJ) [Natural gas (resource)]	ReCiPe 1.08 Endpoint (I) - Fossil depletion	-	0.00136229206639548
Pit gas (in MJ) [Natural gas (resource)]	ReCiPe 1.08 Midpoint (E) - Fossil depletion	-	0.0264202095324625
Pit gas (in MJ) [Natural gas (resource)]	ReCiPe 1.08 Midpoint (H) - Fossil depletion	-	0.0264202095324625
Pit gas (in MJ) [Natural gas (resource)]	ReCiPe 1.08 Midpoint (I) - Fossil depletion	-	0.0264202095324625
Pit gas (in MJ) [Natural gas (resource)]	ReCiPe 2016 v1.1 Endpoint (E) - Fossil depletion	-	0.0073013624569417
Pit gas (in MJ) [Natural gas (resource)]	ReCiPe 2016 v1.1 Endpoint (H) - Fossil depletion	-	0.0073013624569417
Pit gas (in MJ) [Natural gas (resource)]	ReCiPe 2016 v1.1 Endpoint (I) - Fossil depletion	-	0.0073013624569417
Pit gas (in MJ) [Natural gas (resource)]	ReCiPe 2016 v1.1 Midpoint (E) - Fossil depletion	-	0.024228139666066
Pit gas (in MJ) [Natural gas (resource)]	ReCiPe 2016 v1.1 Midpoint (H) - Fossil depletion	-	0.024228139666066
Pit gas (in MJ) [Natural gas (resource)]	ReCiPe 2016 v1.1 Midpoint (I) - Fossil depletion	-	0.024228139666066

Pit gas (in MJ) [Natural gas (resource)]	Resource depletion, mineral, fossils and renewables, midpoint (v1.06)	-	7.7824869242974E-9
Pit gas (in MJ) [Natural gas (resource)]	Resource depletion, mineral, fossils and renewables, midpoint (v1.09)	-	7.7824869242974E-9
Pit gas (in MJ) [Natural gas (resource)]	TRACI 2.1, Resources, Fossil fuels	-	0.150087986725837
Pit gas (in MJ) [Natural gas (resource)]	UBP 2006, Ecological scarcity method	-	3.66173444950909
Pit gas (in MJ) [Natural gas (resource)]	UBP 2013, Energy resources	-	3.7728059137797
Platin deposit (3ppm) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	6.66E-6
Plywood board (5% moisture) [Materials from renewable raw materials]	Energy (gross calorific value)	17.63205771	-
Plywood board (5% moisture) [Materials from renewable raw materials]	Energy (net calorific value)	16.69155759	19
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Apr. 2013, Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.)	171.826012188975	62.49809051
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Apr. 2013, Human Toxicity Potential (HTP inf.)	572399.623783456	199567.4997
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Apr. 2013, Marine Aquatic Ecotoxicity Pot. (MAETP inf.)	4260.50770204256	1514.29773
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Apr. 2013, Terrestric Ecotoxicity Potential (TETP inf.)	1.01919786472051	0.356382526
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Apr. 2015, Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.)	171.826012188975	62.49809051
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Apr. 2015, Human Toxicity Potential (HTP inf.)	572399.623783456	199567.4997

Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Apr. 2015, Marine Aquatic Ecotoxicity Pot. (MAETP inf.)	4260.50770204256	1514.29773
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Apr. 2015, Terrestric Ecotoxicity Potential (TETP inf.)	1.01919786472051	0.356382526
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Dec. 07, Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.)	171.826012188975	62.49809051
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Dec. 07, Human Toxicity Potential (HTP inf.)	572399.623783456	199567.4997
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Dec. 07, Marine Aquatic Ecotoxicity Pot. (MAETP inf.)	4260.50770204256	1514.29773
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Dec. 07, Terrestric Ecotoxicity Potential (TETP inf.)	1.01919786472051	0.356382526
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Jan. 2016, Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.)	171.826012188975	62.49809051
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Jan. 2016, Human Toxicity Potential (HTP inf.)	572399.623783456	199567.4997
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Jan. 2016, Marine Aquatic Ecotoxicity Pot. (MAETP inf.)	4260.50770204256	1514.29773
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Jan. 2016, Terrestric Ecotoxicity Potential (TETP inf.)	1.01919786472051	0.356382526
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Nov. 09, Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.)	171.826012188975	62.49809051
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Nov. 09, Human Toxicity Potential (HTP inf.)	572399.623783456	199567.4997
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Nov. 09, Marine Aquatic Ecotoxicity Pot. (MAETP inf.)	4260.50770204256	1514.29773

Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Nov. 09, Terrestric Ecotoxicity Potential (TETP inf.)	1.01919786472051	0.356382526
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Nov. 2010, Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.)	171.826012188975	62.49809051
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Nov. 2010, Human Toxicity Potential (HTP inf.)	572399.623783456	199567.4997
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Nov. 2010, Marine Aquatic Ecotoxicity Pot. (MAETP inf.)	4260.50770204256	1514.29773
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	CML2001 - Nov. 2010, Terrestric Ecotoxicity Potential (TETP inf.)	1.01919786472051	0.356382526
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	EF 3.0 Ecotoxicity freshwater	-	1137.1
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	EF 3.0 Ecotoxicity freshwater (Organic)	-	1137.1
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	EF 3.0 Non-cancer human health effects	-	1.1047E-6
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	EF 3.0 Non-cancer human health effects (Organic)	-	1.1047E-6
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	EPS 2015d_5.3.2 Organic emissions to air (group VOC) - Group NMVOC: Group PAH to air	7.542197802	-
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	EPS 2015dx_5.3.2 Organic emissions to air (group VOC) - Group NMVOC: Group PAH to air	7.542197802	-
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	I02+ v2.1 - Photochemical oxidation - Midpoint	0.985915493	-

Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Apr. 2013, Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.)	-	62.49809051
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Apr. 2013, Human Toxicity Potential (HTP inf.)	-	199567.4997
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Apr. 2013, Marine Aquatic Ecotoxicity Pot. (MAETP inf.)	-	1514.29773
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Apr. 2013, Terrestric Ecotoxicity Potential (TETP inf.)	-	0.356382526
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Apr. 2015, Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.)	-	62.49809051
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Apr. 2015, Human Toxicity Potential (HTP inf.)	-	199567.4997
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Apr. 2015, Marine Aquatic Ecotoxicity Pot. (MAETP inf.)	-	1514.29773
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Apr. 2015, Terrestric Ecotoxicity Potential (TETP inf.)	-	0.356382526
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Dec. 07, Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.)	-	62.49809051
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Dec. 07, Human Toxicity Potential (HTP inf.)	-	199567.4997
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Dec. 07, Marine Aquatic Ecotoxicity Pot. (MAETP inf.)	-	1514.29773
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Dec. 07, Terrestric Ecotoxicity Potential (TETP inf.)	-	0.356382526
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Jan. 2016, Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.)	-	62.49809051

Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Jan. 2016, Human Toxicity Potential (HTP inf.)	-	199567.4997
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Jan. 2016, Marine Aquatic Ecotoxicity Pot. (MAETP inf.)	-	1514.29773
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Jan. 2016, Terrestric Ecotoxicity Potential (TETP inf.)	-	0.356382526
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Nov. 09, Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.)	-	62.49809051
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Nov. 09, Human Toxicity Potential (HTP inf.)	-	199567.4997
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Nov. 09, Marine Aquatic Ecotoxicity Pot. (MAETP inf.)	-	1514.29773
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Nov. 09, Terrestric Ecotoxicity Potential (TETP inf.)	-	0.356382526
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Nov. 2010, Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.)	-	62.49809051
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Nov. 2010, Human Toxicity Potential (HTP inf.)	-	199567.4997
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Nov. 2010, Marine Aquatic Ecotoxicity Pot. (MAETP inf.)	-	1514.29773
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001 - Nov. 2010, Terrestric Ecotoxicity Potential (TETP inf.)	-	0.356382526
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001, Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.)	-	165.28
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001, Human Toxicity Potential (HTP inf.)	-	572399.623783457

Polycyclic hydrocarbons [Group NMVOC to air]	CML2001, Marine Aquatic Ecotoxicity Pot. (MAETP inf.)	-	7276.50000000002
Polycyclic hydrocarbons [Group NMVOC to air]	CML2001, Terrestric Ecotoxicity Potential (TETP inf.)	-	0.802800000000002
Polycyclic hydrocarbons [Group NMVOC to air]	CML96, Aquatic ecotoxicity potential (AETP)	-	0.0013000013000013
Polycyclic hydrocarbons [Group NMVOC to air]	CML96, Human toxicity potential (HTP)	-	28.999797001421
Polycyclic hydrocarbons [Group NMVOC to air]	CML96, Photochemical oxidant potential (POCP)	-	0.760977094589453
Polycyclic hydrocarbons [Group NMVOC to air]	CML96, Terrestric ecotoxicity potential (TETP)	-	0.063000063000063
Polycyclic hydrocarbons [Group NMVOC to air]	EDIP 1997, Photochemical oxidant potential (high NOx)	-	0.8
Polycyclic hydrocarbons [Group NMVOC to air]	EDIP 1997, Photochemical oxidant potential (low NOx)	-	0.4
Polycyclic hydrocarbons [Group NMVOC to air]	EDIP 2003, Photochemical ozone formation - impact on human health and materials	-	0.1121
Polycyclic hydrocarbons [Group NMVOC to air]	EDIP 2003, Photochemical ozone formation - impact on vegetation	-	1387
Polycyclic hydrocarbons [Group NMVOC to air]	EF 3.0 Ecotoxicity freshwater	-	1137.1
Polycyclic hydrocarbons [Group NMVOC to air]	EF 3.0 Ecotoxicity freshwater (Organic)	-	1137.1
Polycyclic hydrocarbons [Group NMVOC to air]	EF 3.0 Non-cancer human health effects	-	1.1047E-6
Polycyclic hydrocarbons [Group NMVOC to air]	EF 3.0 Non-cancer human health effects (Organic)	-	1.1047E-6

Polycyclic hydrocarbons [Group NMVOC to air]	EI95, Carcinogenic substances	-	1
Polycyclic hydrocarbons [Group NMVOC to air]	EI99, EA, Ecosystem quality, Ecotoxicity	-	0.000780000000000001
Polycyclic hydrocarbons [Group NMVOC to air]	EI99, EA, Human health, Carcinogenic effects	-	0.00017
Polycyclic hydrocarbons [Group NMVOC to air]	EI99, HA, Ecosystem quality, Ecotoxicity	-	0.000780000000000001
Polycyclic hydrocarbons [Group NMVOC to air]	EI99, HA, Human health, Carcinogenic effects	-	0.00017
Polycyclic hydrocarbons [Group NMVOC to air]	EI99, IA, Ecosystem quality, Ecotoxicity	-	0.000780000000000001
Polycyclic hydrocarbons [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	-
Polycyclic hydrocarbons [Group NMVOC to air]	EPS 2015d_5.3 Organic emissions to air (group VOC)	7.542197802	-
Polycyclic hydrocarbons [Group NMVOC to air]	EPS 2015d_5.3.1 Organic emissions to air (group VOC): Group NMVOC	0	-
Polycyclic hydrocarbons [Group NMVOC to air]	EPS 2015dx_5.3 Organic emissions to air (group VOC)	7.542197802	-
Polycyclic hydrocarbons [Group NMVOC to air]	EPS 2015dx_5.3.1 Organic emissions to air (group VOC): Group NMVOC	0	-
Polycyclic hydrocarbons [Group NMVOC to air]	Hazardous Air Pollutants (HAP)	-	1
Polycyclic hydrocarbons [Group NMVOC to air]	NF EN 15804, Air pollution	9090.909091	1000000
Polycyclic hydrocarbons [Group NMVOC to air]	Photochemical ozone formation midpoint, human health (v1.06)	0.476	-
Polycyclic hydrocarbons [Group NMVOC to air]	Photochemical ozone formation midpoint, human health (v1.09)	0.476	-

Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.07 Endpoint (H) - Freshwater ecotoxicity	1.016E-14	1.265E-11
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.07 Endpoint (H) - Human toxicity	6.888E-9	1.435E-5
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.07 Endpoint (H) - Marine ecotoxicity	1.682E-15	-
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.07 Endpoint (H) - Photochemical oxidant formation	1.856E-8	-
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.07 Endpoint (H) - Terrestrial ecotoxicity	2.44E-12	1.656E-8
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.07 Midpoint (H) - Freshwater ecotoxicity	1.18E-5	0.0147
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.07 Midpoint (H) - Human toxicity	0.00984	20.5
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.07 Midpoint (H) - Marine ecotoxicity	9.55E-6	0.0108
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.07 Midpoint (H) - Photochemical oxidant formation	0.476	-
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.07 Midpoint (H) - Terrestrial ecotoxicity	1.62E-5	0.11
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Endpoint (E) - Freshwater ecotoxicity	-	1.58647E-11
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Endpoint (E) - Human toxicity	-	1.80389E-5
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Endpoint (E) - Marine ecotoxicity	-	2.64733E-12

Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Endpoint (E) - Terrestrial ecotoxicity	-	2.18725E-8
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Endpoint (H) - Freshwater ecotoxicity	-	1.58647E-11
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Endpoint (H) - Human toxicity	-	1.80389E-5
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Endpoint (H) - Marine ecotoxicity	-	2.64733E-12
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Endpoint (H) - Terrestrial ecotoxicity	-	2.18723E-8
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Endpoint (I) - Freshwater ecotoxicity	-	1.58647E-11
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Endpoint (I) - Human toxicity	-	1.78738E-5
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Endpoint (I) - Marine ecotoxicity	-	2.64733E-12
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Endpoint (I) - Terrestrial ecotoxicity	-	2.18723E-8
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Midpoint (E) - Freshwater ecotoxicity	-	0.01842916
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Midpoint (E) - Human toxicity	-	25.76983264
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Midpoint (E) - Marine ecotoxicity	-	0.015032581
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Midpoint (E) - Terrestrial ecotoxicity	-	0.145248517

Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Midpoint (H) - Freshwater ecotoxicity	-	0.01842916
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Midpoint (H) - Human toxicity	-	25.76983263
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Midpoint (H) - Marine ecotoxicity	-	0.015032581
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Midpoint (H) - Terrestrial ecotoxicity	-	0.145246668
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Midpoint (I) - Freshwater ecotoxicity	-	0.01842916
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Midpoint (I) - Human toxicity	-	25.53395707
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Midpoint (I) - Marine ecotoxicity	-	0.015032581
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 1.08 Midpoint (I) - Terrestrial ecotoxicity	-	0.145246668
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Endpoint (E) - Freshwater ecotoxicity	-	1.9043E-10
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Endpoint (E) - Human toxicity, cancer	-	0.000108232
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Endpoint (E) - Human toxicity, non-cancer	-	7.13344E-7
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Endpoint (E) - Marine ecotoxicity	-	1.2684E-9
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Endpoint (E) - Terrestrial ecotoxicity	-	5.35072E-10

Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Endpoint (H) - Freshwater ecotoxicity	-	1.9043E-10
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Endpoint (H) - Human toxicity, cancer	-	0.000108232
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Endpoint (H) - Human toxicity, non-cancer	-	7.13344E-7
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Endpoint (H) - Marine ecotoxicity	-	1.2684E-9
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Endpoint (H) - Terrestrial ecotoxicity	-	5.35072E-10
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Endpoint (I) - Freshwater ecotoxicity	-	1.90083E-10
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Endpoint (I) - Human toxicity, cancer	-	0.000106074
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Endpoint (I) - Human toxicity, non-cancer	-	7.13343E-7
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Endpoint (I) - Marine ecotoxicity	-	1.26683E-9
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Endpoint (I) - Terrestrial ecotoxicity	-	5.35071E-10
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Midpoint (E) - Freshwater ecotoxicity	-	0.274
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Midpoint (E) - Human toxicity, cancer	-	32.6
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Midpoint (E) - Human toxicity, non-cancer	-	3.128699866

Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Midpoint (E) - Marine ecotoxicity	-	12.08
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Midpoint (E) - Terrestrial ecotoxicity	-	46.93611993
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Midpoint (H) - Freshwater ecotoxicity	-	0.274
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Midpoint (H) - Human toxicity, cancer	-	32.6
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Midpoint (H) - Human toxicity, non-cancer	-	3.128699865
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Midpoint (H) - Marine ecotoxicity	-	12.08
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Midpoint (H) - Terrestrial ecotoxicity	-	46.93611993
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Midpoint (I) - Freshwater ecotoxicity	-	0.2735
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Midpoint (I) - Human toxicity, cancer	-	31.95
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Midpoint (I) - Human toxicity, non-cancer	-	3.128699379
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Midpoint (I) - Marine ecotoxicity	-	12.065
Polycyclic hydrocarbons [Group NMVOC to air]	ReCiPe 2016 v1.1 Midpoint (I) - Terrestrial ecotoxicity	-	46.93602473
Polycyclic hydrocarbons [Group NMVOC to air]	TRACI 2.1, Smog Air	0.994	5.58000000000001

Polycyclic hydrocarbons [Group NMVOC to air]	UBP 2006, Ecological scarcity method	-	18000
Polycyclic hydrocarbons [Group NMVOC to air]	UBP 2013, Carcinogenic substances into air	-	1300000
Polycyclic hydrocarbons [Group NMVOC to air]	UBP, Ecological scarcity method	-	32000
Polyvinylchloride-tube (PVC) [Plastic parts]	Energy (gross calorific value)	17.8	-
Polyvinylchloride-tube (PVC) [Plastic parts]	Energy (net calorific value)	16.753	20
Potashsalt, crude (hard salt, 10% K2O) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.328E-9
Potassium chloride [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Precious metal ore (R.O.M) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	8.38987E-5
Propane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Propene (propylene) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Propionaldehyde [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Propionic acid (propane acid) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Propyl acetate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Propyl cyclopentan [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Propylamine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Propylene carbonate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Propylene glycol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Propylene glycol methyl ether acetate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Propylene oxide [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Pyridine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Pyrite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Pyrolusite, in ground [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Quartz sand (silica sand; silicon dioxide) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Rare-earth ore [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Rhodium deposit (1ppm) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
River water to turbine, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
River water to turbine, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
River water to turbine, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
River water, extreme scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001

River water, extreme scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
River water, extreme scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
River water, high scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
River water, high scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
River water, high scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
River water, low scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
River water, low scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
River water, low scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
River water, medium scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
River water, medium scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
River water, medium scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
River water, moderate scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
River water, moderate scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001

River water, moderate scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
River water, OECD average scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
River water, OECD average scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
River water, OECD average scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
River water, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
River water, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
River water, regionalized, SA [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
River water, very high scarcity [Water]	ReCiPe 1.08 Midpoint (E) - Water depletion	-	0.001
River water, very high scarcity [Water]	ReCiPe 1.08 Midpoint (H) - Water depletion	-	0.001
River water, very high scarcity [Water]	ReCiPe 1.08 Midpoint (I) - Water depletion	-	0.001
Rutile (titanium ore) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.5903E-8
Sabinene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Salt [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Sand [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0

Sandy soil [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
sec-Butanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
sec-Butyl acetate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
sec-Butyl benzene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Secondary alkane sulphonate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Selenium deposit (0.025) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	4.85E-5
Shale [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Silt [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Silver deposit (20ppm) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	2.36E-5
Slate [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Sodium 3-Nitrobenzenesulfonate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Sodium benzoate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Sodium bromide, in ground [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Sodium carbonate (soda) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Sodium chloride (rock salt) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Sodium nitrate [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0

Sodium sulphate [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Sodium-dodecylbenzenesulfonate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Soil [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Specular stone [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Spodumen (LiAlSi2 O6) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	4.32796E-7
Steatite, in ground [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Stibnite, in ground [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Stone and gravel from land [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Stone from mountains [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Stone, sand and gravel from sea [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Styrene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Sulphur (bonded) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.000193
Sulphur dioxide [Inorganic emissions to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	13.6	15.04
Sun protection (textile) [Plastics]	Mass	-	0.4
Sun protection metal blinds [Assemblies]	Mass	-	2.391
Sylvine [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Sylvite (25% in Sylvinite) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Talc [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0

Tall oil (raw product) [Organic intermediate products]	C_total_wt	0.43	0.79
t-Butylamine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Terpenes [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
tertiary-Butanol [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
tertiary-Butyl acetate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Tetralin [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Tin ore (0.01%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.62E-5
TiO2, 54% in ilmenite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.674E-8
TiO2, 54% in ilmenite, 2.6% [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.674E-8
TiO2, 95% in rutile, 0.40% [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.674E-8
Titanium dioxide [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	1.68795E-8
Titanium ore [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	8.37E-9
Tolualdehyde [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Toluene (methyl benzene) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Toluene diisocyanate (TDI) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Toluene-2,4-diamine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
trans-2-Butene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
trans-2-Hexene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
trans-2-Pentene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Tributyl phosphate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Tributylphosphorotrithioate [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Trichlorosilane [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Triethanolamine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Triethylamine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Trimethylamine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Trona [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Tuff [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Tungsten ore (1%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.0044748
Turpentine [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Ulexite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.000532419
Underground extracted ore [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Underground Mine Ore [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Vanadium ore (ROM) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	4.05328E-9
Vanadium ore (V2O5 0.94%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	4.05636E-9
Vermiculite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0
Vinyl acetat [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Vinyl toluene [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Waste paper [Waste for recovery]	Cost	1.07605504587156E-7	0
Welding seam [Others]	Mass	-	0.027
Wire [Metal parts]	Cost	-	0
Wollastonite [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	3.37931E-12
Xylene (dimethyl benzene) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Xylene (meta-Xylene; 1,3-Dimethylbenzene) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Xylene (ortho-Xylene; 1,2-Dimethylbenzene) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05
Xylene (para-Xylene; 1,4-Dimethylbenzene) [Group NMVOC to air]	Environmental cost of air emissions (UBA, version 3.0, 2018)	1.1	2.05

Zinc - Copper - Lead - Ore (2.11% Zn 0.51% Cu 0.86% Pb) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	7.28628E-5
Zinc - Copper - Lead - Ore (4% Zn 0.09% Cu 0.65% Pb) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	6.3963E-5
Zinc - Copper - Lead - Ore (5.37% Zn 0.22% Cu 0.2% Pb) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	4.45846E-5
Zinc - Copper - Lead - Ore (6.95% Zn 0.13% Cu 2.04% Pb) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.000168508
Zinc - copper ore (4.07%-2.59%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	5.73796E-5
Zinc - lead - copper ore (12%-3%-2%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.00028216
Zinc - Lead - Silver - Ore (7.5% Zn; 4.0% Pb; 40.8 g/t Ag) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.000342094
Zinc - Lead - Silver - ore (8.54% Zn; 5.48% Pb; 94 g/t Ag) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.005281377
Zinc - Lead Ore (21.7%-5.6%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.000471786
Zinc - lead ore (4.21%-4.96%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.000337114
Zinc - lead ore (R.O.M) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.000337114
Zinc Ore (12.6% Zn) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	6.7788E-5
Zinc ore (3.98%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	2.14124E-5
Zinc ore (4%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	2.152E-5
Zinc ore (8%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	4.304E-5
Zinc Ore (9.7-14% Zn 3.1-6.5% Pb) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.000248726

Zinc ore (sulphide, zinc 3.98%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	2.14124E-5
Zinc ore (sulphidic, 4%) [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	2.152E-5
Zinc, Zn 0.63%, Au 9.7E-4%, Ag 9.7E-4%, Cu 0.38%, Pb 0.014% [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	0.000538
Zirconium sand [Non renewable resources]	EF 3.0 Resource use, mineral and metals	-	2.70368E-6

3. Renaming of flows

We found some inconsistent naming which were corrected.

Renamed flows

Service pack 39	Service pack 40
Polycyclic hydrocarbons	Polycyclic aromatic hydrocarbons (PAH)
Disulfoton	Disulfothon
Dust (combustion)	Dust (PM10)
Fluorides	Fluoride
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (14 nm node)	IC WLP CSP 196 (209mg) (12x12x1.41mm) CMOS logic (14 nm node)
IC WLP CSP 196 (400mg) (12x12x1.41mm) CMOS logic (22 nm node)	IC WLP CSP 196 (209mg) (12x12x1.41mm) CMOS logic (22 nm node)
IC WLP CSP 196 (400mg) (12x12x1.41mm) DRAM (57 nm node)	IC WLP CSP 196 (209mg) (12x12x1.41mm) DRAM (57 nm node)
IC WLP CSP 196 (400mg) (12x12x1.41mm) flash (45 nm node)	IC WLP CSP 196 (209mg) (12x12x1.41mm) flash (45 nm node)
IC WLP CSP 196 (400mg) (12x12x1.41mm) MPU generic (130 nm node)	IC WLP CSP 196 (209mg) (12x12x1.41mm) MPU generic (130 nm node)
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (14 nm node)	IC WLP CSP 425 (4.78g) (19x19x1.5mm) CMOS logic (14 nm node)
IC WLP CSP 425 (736mg) (19x19x1.5mm) CMOS logic (22 nm node)	IC WLP CSP 425 (4.78g) (19x19x1.5mm) CMOS logic (22 nm node)
IC WLP CSP 425 (736mg) (19x19x1.5mm) DRAM (57 nm node)	IC WLP CSP 425 (4.78g) (19x19x1.5mm) DRAM (57 nm node)
IC WLP CSP 425 (736mg) (19x19x1.5mm) flash (45 nm node)	IC WLP CSP 425 (4.78g) (19x19x1.5mm) flash (45 nm node)
IC WLP CSP 425 (736mg) (19x19x1.5mm) MPU generic (130 nm node)	IC WLP CSP 425 (4.78g) (19x19x1.5mm) MPU generic (130 nm node)
Oils, unspecified	Oil (unspecified)
Polycyclic aromatic hydrocarbons (PAH, carcinogenic)	Polycyclic aromatic hydrocarbons (PAH)
Polycyclic hydrocarbons	Polycyclic aromatic hydrocarbons (PAH)

4. Merged flows

Merging of flows in SP40

Service pack 39 flow	Service pack 40 flow
Disulfoton [Pesticides to fresh water]	Disulfothon [Pesticides to fresh water]
Dust (combustion) [Particles to air]	Dust (PM10) [Particles to air]
Fluorides [Inorganic emissions to air]	Fluoride [Inorganic emissions to air]
Oils, unspecified [Organic emissions to agricultural soil]	Oil (unspecified) [Organic emissions to agricultural soil]
Polycyclic aromatic hydrocarbons (PAH, carcinogenic) [Group PAH to air]	Polycyclic aromatic hydrocarbons (PAH) [Group PAH to air]
Polycyclic hydrocarbons [Group NMVOC to air]	Polycyclic aromatic hydrocarbons (PAH) [Group PAH to air]
Disulfoton [Pesticides to fresh water]	Disulfothon [Pesticides to fresh water]
Dust (combustion) [Particles to air]	Dust (PM10) [Particles to air]

5. New flows

Flow	Folder
Asphalt binder (no additives)	Refinery products
IC DFN 10 (22.3 mg) 14 nm node	Components
IC QFN 24 (61.6 mg) 45 nm node	Components
IC QFN 76 (578.8 mg) 45 nm node	Components
Polyamide 6 fibres (PA 6)	Plastics
Sulphuric acid (75%)	Intermediate products
Transistor signal SOT-883 (SC-101/XQFN3) (0.855 mg) 1.0 x 0.6 x 0.48	Components
Zircon sand (ZrSiO4)	Metals

GaBi ts version 9.2.1 will be available to you via the automatic update functionality in the GaBi software or via the offline upgrade. No new installation procedure will be necessary.

On February 20th 2020, the new software version is available to you on the GaBi update server - the software will prompt you to download the updated version.

If you do not have a valid maintenance contract, you will not have access to this upgrade. Please contact your local GaBi sales representative for a quote gabi@thinkstep.com.

www.sphera.com
www.gabi-software.com

For more information contact us at:
https://sphera.com/contact-us