We create chemistry

Safety data sheet

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.
Date / Revised: 13.02.2024 Version: 1.0
Date / Previous version: not applicable Previous version: none
Product: **n-HEXYL GLYCOL**
(ID no. 30034797/SDS_GEN_CZ/EN)
Date of print 07.10.2025

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

n-HEXYL GLYCOL

Chemical name: 2-hexyloxyethanol
INDEX-Number: 603-178-00-3
CAS Number: 112-25-4

REACH registration number: 01-2119486575-24-0001, 01-2119486575-24-0004

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Chemical

For the detailed identified uses of the product see appendix of the safety data sheet.

1.3. Details of the supplier of the safety data sheet

Company:
BASF SE
67056 Ludwigshafen
GERMANY

Contact address:
BASF spol. s r.o.
Radlická 354/107b
158 00 Praha 5, CZECH REPUBLIC

Telephone: + 420 235 000 111
E-mail address: product-safety-cz-sk@basf.com

1.4. Emergency telephone number

Klinika nemoci z povolani, Tox. inf. stredisko
Na bojisti 1, 128 08 Praha 2
CZECH REPUBLIC
+420 224919293, +420 224915402
International emergency number:

Telephone: +49 180 2273-112

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

Acute Tox. 4 (oral)	H302 Harmful if swallowed.
Acute Tox. 3 (dermal)	H311 Toxic in contact with skin.
Skin Corr./Irrit. 1B	H314 Causes severe skin burns and eye damage.
Eye Dam./Irrit. 1	H318 Causes serious eye damage.

For the classifications not written out in full in this section the full text can be found in section 16.

2.2. Label elements

According to Regulation (EC) No 1272/2008 [CLP]

Pictogram:

Signal Word:

Danger

Hazard Statement:

H311	Toxic in contact with skin.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

Precautionary Statements (Prevention):

P280	Wear protective gloves, protective clothing and eye protection or face protection.

Precautionary Statements (Response):

P310	Immediately call a POISON CENTER or physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Precautionary Statements (Storage):

P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.

Hazard determining component(s) for labelling: 2-hexyloxyethanol, 2-(2-hexyloxyethoxy)ethanol

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.
See section 12 - Results of PBT and vPvB assessment.
Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.
Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.
The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Chemical nature

2-hexyloxyethanol

Content (W/W): > 98,5 %	Acute Tox. 4 (oral)
CAS Number: 112-25-4	Acute Tox. 3 (dermal)
EC-Number: 203-951-1	Skin Corr./Irrit. 1B
INDEX-Number: 603-178-00-3	Eye Dam./Irrit. 1
	H311, H302, H314

Regulatory relevant ingredients

2-hexyloxyethanol

Content (W/W): > 98,5 % - < 99,1 %	Acute Tox. 4 (oral)
	Acute Tox. 3 (dermal)
CAS Number: 112-25-4	Skin Corr./Irrit. 1B
EC-Number: 203-951-1	Eye Dam./Irrit. 1
INDEX-Number: 603-178-00-3	H311, H302, H314

2-(2-hexyloxyethoxy)ethanol

Content (W/W): >= 0,03 % - <= 0,28 %	Acute Tox. 4 (dermal)
	Eye Dam./Irrit. 1
CAS Number: 112-59-4	STOT SE 3 (drowsiness and dizziness)
EC-Number: 203-988-3	H318, H312, H336
INDEX-Number: 603-175-00-7	

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

3.2. Mixtures

Not applicable

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

If not breathing, give artificial respiration.

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

On skin contact:
Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

On contact with eyes:
Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:
Do not induce vomiting. Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Hazards: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11. (Further) symptoms and / or effects are not known so far

4.3. Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:
dry powder, water spray, carbon dioxide, foam

Unsuitable extinguishing media for safety reasons:
water jet

Additional information:
Use extinguishing measures to suit surroundings.

5.2. Special hazards arising from the substance or mixture

Advice: Flammable liquid Cool endangered containers with water-spray. See SDS section 7 - Handling and storage.

5.3. Advice for fire-fighters

Special protective equipment:
Wear a self-contained breathing apparatus. Special protective equipment for firefighters

Further information:
Evacuate area of all unnecessary personnel. Fight fire from maximum distance.

Extend fire extinguishing measures to the surroundings. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6: Accidental Release Measures

High risk of slipping due to leakage/spillage of product.

Release of substance/product can cause fire or explosion. Shut off or stop source of leak. Shut off or stop released substance/product under safe conditions.

Pack in tightly closed containers for disposal.

6.1. Personal precautions, protective equipment and emergency procedures

Handle in accordance with good industrial hygiene and safety practice.

Avoid all sources of ignition: heat, sparks, open flame. Use antistatic tools.

6.2. Environmental precautions

Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up

Pick up with suitable appliance and dispose of. Spills should be contained, solidified, and placed in suitable containers for disposal. Dispose of absorbed material in accordance with regulations.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:
Avoid all sources of ignition: heat, sparks, open flame. Ground all transfer equipment properly to prevent electrostatic discharge.

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

7.3. Specific end use(s)

See exposure scenario(s) in the attachment to this safety data sheet.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits
No substance specific occupational exposure limits known.

PNEC

freshwater: 0,14 mg/l

marine water: 0,014 mg/l

intermittent release: 1,4 mg/l

sediment (freshwater): 0,644 mg/kg

sediment (marine water): 0,0644 mg/kg

soil: 0,0467 mg/kg

STP: 75 mg/l

DNEL

worker:
Long-term exposure- systemic effects, dermal: 9,3 mg/kg

worker:
Long-term exposure- systemic effects, Inhalation: 18,4 mg/m3, 3,1 ppm

consumer:
Long-term exposure- systemic effects, dermal: 4,63 mg/kg

consumer:
Long-term exposure- systemic effects, Inhalation: 2,9 mg/m3, 0,5 ppm

worker:
Short-term exposure - systemic effects, dermal: 18,5 mg/kg

consumer:
Short-term exposure - systemic effects, dermal: 9,25 mg/kg

8.2. Exposure controls

Personal protective equipment

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Gas filter for gases/vapours of organic compounds (boiling point >65 °C, e. g. EN 14387 Type A)

Hand protection:
Chemical resistant protective gloves (EN ISO 374-1)
Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1):
butyl rubber (butyl) - 0.7 mm coating thickness
Manufacturer's directions for use should be observed because of great diversity of types.
Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Eye protection:
Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

Avoid contact with the skin, eyes and clothing. Wearing of closed work clothing is required additionally to the stated personal protection equipment.

Environmental exposure controls

All appropriate measures must be taken to prevent the release of this product to the environment and to limit the dispersion of any release when it occurs. Suitable risk management measures should be in place.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

State of matter:	liquid	
Form:	liquid	
Colour:	colourless, clear	
Odour:	ether-like	
Odour threshold:	not determined	
Melting point:	-42 °C (1.013 hPa)	
Boiling range:	200 - 212 °C (1.013,3 hPa)	
Flammability:	Combustible liquid.	(derived from flash point)
Lower explosion limit:	0,9 %(V) (82,85 °C) The lower explosion point of the substance/mixture has been determined. The explosion point describes the temperature of a flammable liquid at which the concentration of the saturated vapour mixed with air equals the lower explosion limit., Literature data.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Flash point:	91,5 °C	(ISO 2719, closed cup)
Auto-ignition temperature:	225 °C	(DIN 51794)
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
pH value:	neutral	
Viscosity, dynamic:	4,4 mPa.s (20 °C)	

Thixotropy:	not thixotropic	
Solubility in water:	9,460 g/l (20 °C)	
Solubility (qualitative) solvent(s):	organic solvents soluble	
Partitioning coefficient n-octanol/water (log Kow):	1,97 (25 °C)	
Vapour pressure:	0,1 hPa (22,9 °C) dynamic	(OECD Guideline 104)
Relative density:	0,8875 (20 °C)	
Density:	0,8875 g/cm3 (20 °C) Literature data.	
Relative vapour density (air):	5,04 (20 °C) Heavier than air.	(calculated)

Particle characteristics

Particle size distribution: The substance / product is marketed or used in a non solid or granular form. -

9.2. Other information

Information with regard to physical hazard classes

Explosives

Explosion hazard: Based on the chemical structure there is no indication of explosive properties.

Impact sensitivity:

Based on the chemical structure there is no shock-sensitivity.

Oxidizing properties

Fire promoting properties: Based on its structural properties the product is not classified as oxidizing.

Pyrophoric properties

Self-ignition temperature: Test type: Spontaneous self-ignition at room-temperature.

Based on its structural properties the product is not classified as self-igniting.

Self-heating substances and mixtures

Self heating ability: not applicable, the product is a liquid

Substances and mixtures, which emit flammable gases in contact with water

Formation of flammable gases:

Forms no flammable gases in the presence of water.

Corrosion to metals

No corrosive effect on metal.

Other safety characteristics

Miscibility with water:
partly miscible

pKA:
The substance does not dissociate.

Adsorption/water - soil: KOC: 10; log KOC: 1 (calculated)

Surface tension:
Based on chemical structure, surface activity is not to be expected.

Molar mass: 146,23 g/mol

SAPT-Temperature:
Study scientifically not justified.

Evaporation rate:
Value can be approximated from Henry's Law Constant or vapor pressure.

SECTION 10: Stability and Reactivity

10.1. Reactivity

When heated can give off ignitable vapours.

Corrosion to metals:	No corrosive effect on metal.	
Formation of flammable gases:	Remarks:	Forms no flammable gases in the presence of water.

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

Reacts with light metals, with evolution of hydrogen. Reacts with strong oxidizing agents.

10.4. Conditions to avoid

No special precautions other than good housekeeping of chemicals.

10.5. Incompatible materials

Substances to avoid:

strong oxidizing agents

10.6. Hazardous decomposition products

Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological Information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Assessment of acute toxicity:

Of moderate toxicity after single ingestion. Of pronounced toxicity after short-term skin contact. Virtually nontoxic by inhalation.

Experimental/calculated data:

LD50 rat (oral): 738 mg/kg (other)
LC0 rat (by inhalation): > 131,58 ppm 6 h (other)
No mortality within the stated exposition time as shown in animal studies. The vapour was tested.
LD50 rabbit (dermal): 757,35 mg/kg (other)

Irritation

Assessment of irritating effects:

Corrosive! Damages skin and eyes.

Experimental/calculated data:

Skin corrosion/irritation

rabbit: Corrosive. (other)
The European Union (EU) has classified this substance with 'Causes burns.'

Serious eye damage/irritation

rabbit: irreversible damage (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:

As the substance is corrosive, conducting sensitization studies is not feasible.

Germ cell mutagenicity

Assessment of mutagenicity:

The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture.

Carcinogenicity

Assessment of carcinogenicity:
The whole of the information assessable provides no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity:
The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Developmental toxicity

Assessment of teratogenicity:

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Specific target organ toxicity (single exposure)

Assessment of STOT single:
not applicable

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

After repeated exposure the prominent effect is local irritation. The substance may cause damage to the liver after repeated inhalation of high doses.

Aspiration hazard

not applicable

Interactive effects

No data available.

11.2. Information on other hazards

Endocrine disrupting properties

The substance is not identified to have endocrine disrupting properties according to Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 nor is included in the Candidate List of substances of very high concern according to EU REACh Article 59 for having endocrine disrupting properties.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish:

LC50 (96 h) 140 mg/l, Pimephales promelas (OECD Guideline 203, static)
Nominal concentration.

Aquatic invertebrates:
EC50 (48 h) 145 mg/l, Daphnia magna (DIN 38412 Part 11, static)
Nominal concentration.

Aquatic plants:
EC50 (72 h) 198 mg/l (growth rate), Scenedesmus subspicatus (DIN 38412 Part 9, static)
Nominal concentration.

Microorganisms/Effect on activated sludge:
EC20 (30 min) 750 mg/l, activated sludge, domestic, non-adapted (DIN EN ISO 8192-OECD 209-88/302/EEC,P. C, aquatic)
Nominal concentration.

Chronic toxicity to fish:
Study scientifically not justified.

Chronic toxicity to aquatic invertebrates:
Study scientifically not justified.

Assessment of terrestrial toxicity:
No data available concerning terrestrial toxicity.

12.2. Persistence and degradability

Assessment biodegradation and elimination (H2O):
Readily biodegradable (according to OECD criteria).

Elimination information:
97 % CO2 formation relative to the theoretical value (20 d) (OECD 301B; ISO 9439; 92/69/EWG, C.4-C) (aerobic)

Assessment of stability in water:
Substance is readily biodegradable, therefore hydrolysis is not expected to be relevant.

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:
No significant accumulation in organisms is expected as a result of the distribution coefficient of n-octanol/water (log Pow).

Bioaccumulation potential:
No data available.

12.4. Mobility in soil

Assessment transport between environmental compartments:
Volatility: The substance will not evaporate into the atmosphere from the water surface.
Adsorption in soil: Adsorption to solid soil phase is not expected.

12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative). Self classification

12.6. Endocrine disrupting properties

The substance is not identified to have endocrine disrupting properties according to Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 nor is included in the Candidate List of substances of very high concern according to EU REACh Article 59 for having endocrine disrupting properties.

12.7. Other adverse effects

The substance is not listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

Additional information

Adsorbable organically-bound halogen (AOX):
This product contains no organically-bound halogen.

Other ecotoxicological advice:
Do not release untreated into natural waters.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Act. No. 541/2020 Coll., Act on Waste, as amended.

Must be disposed of or incinerated in accordance with local regulations.

Contaminated packaging:
Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

SECTION 14: Transport Information

Land transport

ADR

UN number or ID number:	UN2922
UN proper shipping name:	CORROSIVE LIQUID, TOXIC, N.O.S. (ETHYLENEGLYCOL MONOHEXYLETHER)
Transport hazard class(es):	8, 6.1
Packing group:	II
Environmental hazards:	no
Special precautions for user:	Tunnel code: E

RID

UN number or ID number:	UN2922
UN proper shipping name:	CORROSIVE LIQUID, TOXIC, N.O.S. (ETHYLENEGLYCOL MONOHEXYLETHER)
Transport hazard class(es):	8, 6.1
Packing group:	II
Environmental hazards:	no
Special precautions for user:	None known

Inland waterway transport

ADN

UN number or ID number:	UN2922
UN proper shipping name:	CORROSIVE LIQUID, TOXIC, N.O.S. (ETHYLENEGLYCOL MONOHEXYLETHER)
Transport hazard class(es):	8, 6.1
Packing group:	II
Environmental hazards:	no
Special precautions for user:	None known

Transport in inland waterway vessel
Not evaluated

Sea transport

IMDG

UN number or ID number:	UN 2922
UN proper shipping name:	CORROSIVE LIQUID, TOXIC, N.O.S. (ETHYLENEGLYCOL MONOHEXYLETHER)
Transport hazard class(es):	8, 6.1
Packing group:	II
Environmental hazards:	no Marine pollutant: NO
Special precautions for user:	EmS: F-A; S-B

Air transport

IATA/ICAO

UN number or ID number:	UN 2922
UN proper shipping name:	CORROSIVE LIQUID, TOXIC, N.O.S. (ETHYLENEGLYCOL MONOHEXYLETHER)
Transport hazard class(es):	8, 6.1
Packing group:	II
Environmental hazards:	No Mark as dangerous for the environment is needed
Special precautions for user:	None known

14.1. UN number or ID number
See corresponding entries for “UN number or ID number” for the respective regulations in the tables above.

14.2. UN proper shipping name
See corresponding entries for “UN proper shipping name” for the respective regulations in the tables above.

14.3. Transport hazard class(es)
See corresponding entries for “Transport hazard class(es)” for the respective regulations in the tables above.

14.4. Packing group
See corresponding entries for “Packing group” for the respective regulations in the tables above.

14.5. Environmental hazards
See corresponding entries for “Environmental hazards” for the respective regulations in the tables above.

14.6. Special precautions for user
See corresponding entries for “Special precautions for user” for the respective regulations in the tables above.

14.7. Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

SECTION 15: Regulatory Information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 3, 75

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):
Listed in above regulation: no
Classification applies for standard conditions of temperature and pressure.

According to directive No. 350/2011 about chemical substances and chemical formulations the product is designated as dangerous.
Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH), as amended,
Directive 2006/12 / EC of the European Parliament and of the Council on waste, as amended,
Council Directive 91/689/EEC of 12 December 1991 on hazardous waste, as amended,
Czech Republic:
Act No. 258/2000 Coll., Act on the Care and Health of Persons,
Act No. 254/2001 Coll., Act on the Water on Waters and Amendments to Certain Other Acts, as amended,
Governmental Ordinance No. 361/2007 Coll, which stipulates the conditionsfor the protection of employee's health at work,as amended.
Act. No. 541/2020 Coll., Act on Waste, as amended.

ČSN 65 0201 and ČSN 65 6060 for storage, handling and transport

15.2. Chemical Safety Assessment

Chemical Safety Assessment performed

SECTION 16: Other Information

Assessment of the hazard classes according to UN GHS criteria (most recent version)

Acute Tox. 4 (oral)
Skin Corr./Irrit. 1B
Flam. Liq. 4
Eye Dam./Irrit. 1
Acute Tox. 3 (dermal)

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

Acute Tox.	Acute toxicity
Skin Corr./Irrit.	Skin corrosion/irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation
STOT SE	Specific target organ toxicity — single exposure
H311	Toxic in contact with skin.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H312	Harmful in contact with skin.
H336	May cause drowsiness or dizziness.

Abbreviations
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN = The European Agreement concerning the International Carriage of Dangerous Goods by Inland waterways. ATE = Acute Toxicity Estimates. CAO = Cargo Aircraft Only. CAS = Chemical Abstract Service. CLP = Classification, Labelling and Packaging of substances and mixtures. DIN = German national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IBC-Code = Intermediate Bulk Container code. IMDG = International Maritime Dangerous Goods Code. ISO = International Organization for Standardization. STEL = Short-Term Exposure Limit. LC50 = Lethal concentration median for 50% of the population. LD50 = Lethal dose median for 50% of the population. TLV = Threshold Limit Value. MARPOL = The International Convention for the Prevention of Pollution from Ships. NEN = Dutch Norm. NOEC = No Observed Effect Concentration. OEL = Occupational Exposure Limit. OECD = Organization for Economic Cooperation and Development. PBT = Persistent, Bioaccumulative and Toxic. PNEC = Predicted No Effect Level. PPM = Parts per million. RID = The European Agreement concerning the International Carriage of Dangerous Goods by Rail. TWA = Time Weight Average. UN-number = UN number at transport. vPvB = very Persistent and very Bioaccumulative.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Annex: Exposure Scenarios

Index

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1. Short title of exposure scenario

Formulation
ERC2; PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC14, PROC15

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ESVOC SpERC 2.2.o.v2
Operational conditions	
Annual amount used in the EU	100.000 kg
Minimum emission days per year	10

Emission factor air	0,5 %
Emission factor water	0,5 %
Emission factor soil	0,01 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,142743
	Risk from environmental exposure is driven by marine water.
Maximum amount of safe use	7.005,6 kg/d
Risk from environmental exposure is driven by marine water.	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in	

combination with ‘basic’ employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	0,0609 mg/m³
Risk Characterization Ratio (RCR)	0,003311
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with ‘basic’ employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	6,0917 mg/m³
Risk Characterization Ratio (RCR)	0,331069
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC3: Manufacture or formulation in the chemical

	industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with ‘basic’ employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC4: Chemical production where opportunity for exposure arises Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa

Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC5: Mixing or blending in batch processes Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in	

combination with ‘basic’ employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with ‘basic’ employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10,965 mg/m³
Risk Characterization Ratio (RCR)	0,595924
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with ‘basic’ employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa

Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC14: Tabletting, compression, extrusion, pelletisation, granulation Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	

Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC15: Use a laboratory reagent. Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

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2. Short title of exposure scenario

Use in Coatings, (waterborne), (use in industrial settings)
ERC4; PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC15

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ESVOC SpERC 1.1.v1: ESVOC SpERC 1.1.v1
Operational conditions	
Annual amount used in the EU	10.000 kg
Minimum emission days per year	20
Emission factor air	2,5 %
Emission factor water	2 %
Emission factor soil	0,01 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,028658
	Risk from environmental exposure is driven by marine water.
Maximum amount of safe use	1.744,7 kg/d
Risk from environmental exposure is driven by marine water.	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. Use domain: industrial

Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with ‘basic’ employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	0,0609 mg/m³
Risk Characterization Ratio (RCR)	0,003311
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Personal measures have to be applied in case of potential exposure	

only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	6,0917 mg/m³
Risk Characterization Ratio (RCR)	0,331069
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245

Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC4: Chemical production where opportunity for exposure arises Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with ‘basic’ employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC5: Mixing or blending in batch processes Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %

Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC7: Industrial spraying Use domain: industrial
	Surface spraying of liquids
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
	Any sized room
Application rate	> 3 l/min
Risk Management Measures	

Wear suitable respiratory protection.	Effectiveness: 90 %
Ensure that the task is not carried out overhead.	
Ensure that general housekeeping is in place	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, Advanced REACH Tool v1.5
	Worker - inhalation, long-term - systemic
Exposure estimate	11 mg/m³
Risk Characterization Ratio (RCR)	0,597826
Assessment method	Qualitative assessment
	Worker - dermal

Contributing exposure scenario	
Use descriptors covered	PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee	

training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10,965 mg/m³
Risk Characterization Ratio (RCR)	0,595924
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario

Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC10: Roller application or brushing Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week

Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10,965 mg/m³
Risk Characterization Ratio (RCR)	0,595924
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC13: Treatment of articles by dipping and pouring. Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	

Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10,965 mg/m³
Risk Characterization Ratio (RCR)	0,595924
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC15: Use a laboratory reagent. Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with ‘basic’ employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

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3. Short title of exposure scenario

Use in laboratories, (use in industrial settings)
ERC4; PROC10, PROC15

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ESVOC SpERC 1.1.v1: ESVOC SpERC 1.1.v1
Operational conditions	
Annual amount used in the EU	1.000 kg
Minimum emission days per year	20
Emission factor air	2,5 %
Emission factor water	2 %
Emission factor soil	0,01 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,003127
	Risk from environmental exposure is driven by soil.
Maximum amount of safe use	1.598,9 kg/d
Risk from environmental exposure is driven by soil.	

Contributing exposure scenario	
Use descriptors covered	PROC10: Roller application or brushing Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa

Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10,965 mg/m³
Risk Characterization Ratio (RCR)	0,595924
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC15: Use a laboratory reagent. Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in	

combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

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4. Short title of exposure scenario

Distribution of substance
ERC7; PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC15

Control of exposure and risk management measures

Contributing exposure scenario		
Use descriptors covered	ESVOC SpERC 2.2.v1: ESVOC SpERC 2.2.v1	
Operational conditions		
Annual amount used in the EU	100.000 kg	
Minimum emission days per year	300	
Emission factor air	0,001 %	
Emission factor water	0,001 %	
Emission factor soil	0 %	
Receive Surf. Water (Flow Rate).	18.000 m3/d	
Dilution factor river	10	
Dilution factor coast	100	
Risk Management Measures		
Air treatment measures considered suitable are, e.g.		Adsorption
Wastewater treatment measures considered suitable are, e.g.		Acclimated biological treatment
Type of STP		Municipal STP
Assumed sewage treatment plant flow (m3/d)		2.000 m3/d
Exposure estimate and reference to its source		
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Environment	

Risk Characterization Ratio (RCR)	0,000652
	Risk from environmental exposure is driven by soil.
Maximum amount of safe use	102,3 kg/d
Risk from environmental exposure is driven by soil.	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with ‘basic’ employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	0,0609 mg/m³
Risk Characterization Ratio (RCR)	0,003311
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions Use domain: industrial
Operational conditions	

Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	6,0917 mg/m³
Risk Characterization Ratio (RCR)	0,331069
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air	Effectiveness: 30 %

changes per hour)	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC4: Chemical production where opportunity for exposure arises Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³

Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with ‘basic’ employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10,965 mg/m³
Risk Characterization Ratio (RCR)	0,595924
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	

Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general	Effectiveness: 30 %

ventilation (not less than 3 - 5 air changes per hour)	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC15: Use a laboratory reagent. Use domain: industrial
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³

Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

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5. Short title of exposure scenario

Use in laboratories, (use in professional settings)
ERC8a; PROC10, PROC15

Control of exposure and risk management measures

Contributing exposure scenario		
Use descriptors covered	ESVOC SpERC 8.17.v2	
Operational conditions		
Annual amount used in the EU	1.000 kg	
Minimum emission days per year	365	
Emission factor air	50 %	
Emission factor water	50 %	
Emission factor soil	0 %	
Receive Surf. Water (Flow Rate).	18.000 m3/d	
Dilution factor river	10	
Dilution factor coast	100	
Risk Management Measures		
Type of STP		Municipal STP
Assumed sewage treatment plant flow (m3/d)		2.000 m3/d
Exposure estimate and reference to its source		
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Environment	
Risk Characterization Ratio (RCR)	0,000659	
	Risk from environmental exposure is driven by soil.	
Maximum amount of safe use	0,831804 kg/d	
Risk from environmental exposure is driven by soil.		

Contributing exposure scenario	
Use descriptors covered	PROC10: Roller application or brushing

	Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	60 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	9,1375 mg/m³
Risk Characterization Ratio (RCR)	0,496603
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC15: Use a laboratory reagent. Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.

Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

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6. Short title of exposure scenario

Use in Cleaning Agents, (consumer use)
ERC8a, ERC8d; PC20, PC35

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ESVOC SpERC 8.4c.v2
Operational conditions	
Annual amount used in the EU	50.000 kg
Minimum emission days per year	365
Emission factor air	95 %
Emission factor water	2,5 %
Emission factor soil	2,5 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100

Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,000669
	Risk from environmental exposure is driven by soil.
Maximum amount of safe use	41 kg/d
Risk from environmental exposure is driven by soil.	

Contributing exposure scenario	
Use descriptors covered	ESVOC SpERC 8.4c.v2
Operational conditions	
Annual amount used in the EU	50.000 kg
Minimum emission days per year	365
Emission factor air	95 %
Emission factor water	2,5 %
Emission factor soil	2,5 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,000669
	Risk from environmental exposure is driven by soil.
Maximum amount of safe use	41 kg/d
Risk from environmental exposure is driven by soil.	

Contributing exposure scenario	
Use descriptors covered	PC20: Products such as ph-regulators, flocculants, precipitants, neutralisation agents.

Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	Exposure duration: 0,75 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	Application duration: 60 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	197 uses per year
Room size	1 m3
Ventilation rate per hour	0,5
Temperature (Application)	20 °C
body weight	68,8 kg
	Amount per use 0,01 g Relevant for dermal exposure estimates
Release area	20 cm²
	Release area is constant
Release duration	60 min
	Relevant for inhalative exposure estimates
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ConsExpo v4.1, Dermal model: instant application
	Consumer - dermal, short-term - systemic
Exposure estimate	0,1453 mg/kg bw/day
Risk Characterization Ratio (RCR)	0,015713
	The calculation is based on the external dose.
Assessment method	EASY TRA v4.2, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, long-term - systemic
Exposure estimate	0,0001 mg/m³
Risk Characterization Ratio (RCR)	0,000013
	The exposure calculation is based on the mean concentration on the day of exposure.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC35: Washing and Cleaning Products (including solvent based products).
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 25 %
Vapour pressure of the substance	10 Pa

during use	
Duration and Frequency of activity	Exposure duration: 240 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	Application duration: 20 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	197 uses per year
Room size	58 m3
Ventilation rate per hour	0,5
Temperature (Application)	20 °C
body weight	68,8 kg
	Amount per use 0,286 g Relevant for dermal exposure estimates
Release area	320000 cm²
	Release area increases over time
Release duration	20 min
	Relevant for inhalative exposure estimates
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ConsExpo v4.1, Dermal model: instant application
	Consumer - dermal, short-term - systemic
Exposure estimate	1,0392 mg/kg bw/day
Risk Characterization Ratio (RCR)	0,112351
	The calculation is based on the external dose.
Assessment method	EASY TRA v4.2, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, long-term - systemic
Exposure estimate	1,7981 mg/m³
Risk Characterization Ratio (RCR)	0,620047
	The exposure calculation is based on the mean concentration per year.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

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7. Short title of exposure scenario

Use in Coatings, (waterborne), (use in professional settings)
ERC8a, ERC8d; PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ESVOC SpERC 8.3b.v2
Operational conditions	

Annual amount used in the EU	50.000 kg
Minimum emission days per year	365
Emission factor air	98 %
Emission factor water	1 %
Emission factor soil	1 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,000659
	Risk from environmental exposure is driven by soil.
Maximum amount of safe use	41,6 kg/d
Risk from environmental exposure is driven by soil.	

Contributing exposure scenario	
Use descriptors covered	ESVOC SpERC 8.3b.v2
Operational conditions	
Annual amount used in the EU	50.000 kg
Minimum emission days per year	365
Emission factor air	98 %
Emission factor water	1 %
Emission factor soil	1 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	

Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,000659
	Risk from environmental exposure is driven by soil.
Maximum amount of safe use	41,6 kg/d
Risk from environmental exposure is driven by soil.	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with ‘basic’ employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	0,0609 mg/m³
Risk Characterization Ratio (RCR)	0,003311
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or

	processes with equivalent containment conditions Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	9,1375 mg/m³
Risk Characterization Ratio (RCR)	0,496603
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa

Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC4: Chemical production where opportunity for exposure arises Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	

Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10,965 mg/m³
Risk Characterization Ratio (RCR)	0,595924
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC5: Mixing or blending in batch processes Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10,965 mg/m³
Risk Characterization Ratio (RCR)	0,595924
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	60 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with ‘basic’ employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	9,1375 mg/m³
Risk Characterization Ratio (RCR)	0,496603
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa

Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10,965 mg/m³
Risk Characterization Ratio (RCR)	0,595924
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC10: Roller application or brushing Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 80 %
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	

Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC11: Non industrial spraying Use domain: professional
	Surface spraying of liquids
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
	Any sized room
Application rate	> 3 l/min
Risk Management Measures	
Wear suitable respiratory protection.	Effectiveness: 90 %
Ensure that the task is not carried out overhead.	
Ensure that general housekeeping is in place	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	

Assessment method	EASY TRA v4.2, Advanced REACH Tool v1.5
	Worker - inhalation, long-term - systemic
Exposure estimate	11 mg/m³
Risk Characterization Ratio (RCR)	0,597826
Assessment method	Qualitative assessment
	Worker - dermal

Contributing exposure scenario	
Use descriptors covered	PROC13: Treatment of articles by dipping and pouring. Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10,965 mg/m³
Risk Characterization Ratio (RCR)	0,595924
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC15: Use a laboratory reagent. Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol

	Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

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8. Short title of exposure scenario

Use in Cleaning Agents, (use in professional settings)
ERC8a, ERC8d; PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC10, PROC11, PROC13

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ESVOC SpERC 8.4b.v3
Operational conditions	
Annual amount used in the EU	50.000 kg
Minimum emission days per year	365
Emission factor air	4 %

Emission factor water	1 ppm
Emission factor soil	0,2 ppm
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,000652
	Risk from environmental exposure is driven by soil.
Maximum amount of safe use	42 kg/d
Risk from environmental exposure is driven by soil.	

Contributing exposure scenario	
Use descriptors covered	ESVOC SpERC 8.4b.v3
Operational conditions	
Annual amount used in the EU	50.000 kg
Minimum emission days per year	365
Emission factor air	4 %
Emission factor water	1 ppm
Emission factor soil	0,2 ppm
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,000652
	Risk from environmental exposure is driven by soil.

Maximum amount of safe use	42 kg/d
Risk from environmental exposure is driven by soil.	

Contributing exposure scenario	
Use descriptors covered	PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with ‘basic’ employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	9,1375 mg/m³
Risk Characterization Ratio (RCR)	0,496603
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition Use domain: professional

Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	Effectiveness: 30 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	12,7925 mg/m³
Risk Characterization Ratio (RCR)	0,695245
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC4: Chemical production where opportunity for exposure arises Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.

Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10,965 mg/m³
Risk Characterization Ratio (RCR)	0,595924
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	60 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	

Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	9,1375 mg/m³
Risk Characterization Ratio (RCR)	0,496603
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with ‘basic’ employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10,965 mg/m³
Risk Characterization Ratio (RCR)	0,595924
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC10: Roller application or brushing Use domain: professional

Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	60 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 80 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	6,0917 mg/m³
Risk Characterization Ratio (RCR)	0,331069
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC11: Non industrial spraying Use domain: professional
	Surface spraying of liquids
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
	Any sized room

Application rate	> 3 l/min
Risk Management Measures	
Wear suitable respiratory protection.	Effectiveness: 90 %
Ensure that the task is not carried out overhead.	
Ensure that general housekeeping is in place	
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, Advanced REACH Tool v1.5
	Worker - inhalation, long-term - systemic
Exposure estimate	11 mg/m³
Risk Characterization Ratio (RCR)	0,597826
Assessment method	Qualitative assessment
	Worker - dermal

Contributing exposure scenario	
Use descriptors covered	PROC13: Treatment of articles by dipping and pouring. Use domain: professional
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	240 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)	Effectiveness: 70 %
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Wear chemically resistant gloves in	

combination with 'basic' employee training.	
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10,965 mg/m³
Risk Characterization Ratio (RCR)	0,595924
Assessment method	Qualitative assessment
	Worker - dermal
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

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9. Short title of exposure scenario

Use in Coatings, (consumer use)
ERC8a, ERC8c, ERC8d, ERC8f; PC1, PC9a, PC9b, PC24, PC31

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ESVOC SpERC 8.3c.v2
Operational conditions	
Annual amount used in the EU	50.000 kg
Minimum emission days per year	365
Emission factor air	98,5 %
Emission factor water	1 %
Emission factor soil	0,5 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,000659
	Risk from environmental exposure is driven by soil.
Maximum amount of safe use	41,6

	kg/d
Risk from environmental exposure is driven by soil.	

Contributing exposure scenario		
Use descriptors covered	ERC8c: Widespread use leading to inclusion into/onto article (indoor)	
Operational conditions		
Annual amount used in the EU	50.000 kg	
Minimum emission days per year	365	
Emission factor air	15 %	
Emission factor water	1 %	
Emission factor soil	0 %	
Receive Surf. Water (Flow Rate).	18.000 m3/d	
Dilution factor river	10	
Dilution factor coast	100	
Risk Management Measures		
Type of STP		Municipal STP
Assumed sewage treatment plant flow (m3/d)		2.000 m3/d
Exposure estimate and reference to its source		
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Environment	
Risk Characterization Ratio (RCR)	0,00072	
	Risk from environmental exposure is driven by soil.	
Maximum amount of safe use	380,7 kg/d	
Risk from environmental exposure is driven by soil.		

Contributing exposure scenario	
Use descriptors covered	ESVOC SpERC 8.3c.v2
Operational conditions	
Annual amount used in the EU	50.000 kg
Minimum emission days per year	365
Emission factor air	98,5 %
Emission factor water	1 %

Emission factor soil	0,5 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,000659
	Risk from environmental exposure is driven by soil.
Maximum amount of safe use	41,6 kg/d
Risk from environmental exposure is driven by soil.	

Contributing exposure scenario	
Use descriptors covered	ERC8f: Widespread use leading to inclusion into/onto article (outdoor)
Operational conditions	
Annual amount used in the EU	50.000 kg
Minimum emission days per year	365
Emission factor air	15 %
Emission factor water	1 %
Emission factor soil	0,5 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,00072
	Risk from environmental exposure is driven by soil.
Maximum amount of safe use	380,7

	kg/d
Risk from environmental exposure is driven by soil.	

Contributing exposure scenario	
Use descriptors covered	PC1: Adhesives, Sealants
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 2 %
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	Exposure duration: 45 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	Application duration: 30 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	3 uses per year
Room size	10 m3
Ventilation rate per hour	2
Temperature (Application)	20 °C
body weight	65 kg
Release area	250 cm²
	Release area increases over time
Release duration	30 min
	Relevant for inhalative exposure estimates
Contact rate	50 mg/min
Release duration	30 min
	Relevant for dermal exposure estimates
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ConsExpo v4.1, Dermal model: constant application rate
	Consumer - dermal, short-term - systemic
Exposure estimate	0,4615 mg/kg bw/day
Risk Characterization Ratio (RCR)	0,049896
	The calculation is based on the external dose.
Assessment method	EASY TRA v4.2, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, long-term - systemic
Exposure estimate	0,0176 mg/m³
Risk Characterization Ratio (RCR)	0,006072
	The exposure calculation is based on the mean concentration on the day of exposure.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario

Use descriptors covered	PC9a: Coatings and paints, thinners, paint removers
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 7 %
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	Exposure duration: 132 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	Application duration: 120 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	1 uses per year
Room size	20 m3
Ventilation rate per hour	0,6
Temperature (Application)	20 °C
body weight	65 kg
Release area	100000 cm²
	Release area increases over time
Release duration	120 min
	Relevant for inhalative exposure estimates
Contact rate	30 mg/min
Release duration	120 min
	Relevant for dermal exposure estimates
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ConsExpo v4.1, Dermal model: constant application rate
	Consumer - dermal, short-term - systemic
Exposure estimate	3,8769 mg/kg bw/day
Risk Characterization Ratio (RCR)	0,419127
	The calculation is based on the external dose.
Assessment method	EASY TRA v4.2, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, long-term - systemic
Exposure estimate	0,697 mg/m³
Risk Characterization Ratio (RCR)	0,240337
	The exposure calculation is based on the mean concentration on the day of exposure.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC9b: Fillers, putties, plasters, modelling clay
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 2 %

Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	Exposure duration: 240 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	Application duration: 20 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	3 uses per year
Room size	20 m3
Ventilation rate per hour	0,6
Temperature (Application)	20 °C
body weight	65 kg
	Amount per use 0,05 g Relevant for dermal exposure estimates
Release area	200 cm²
	Release area increases over time
Release duration	20 min
	Relevant for inhalative exposure estimates
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ConsExpo v4.1, Dermal model: instant application
	Consumer - dermal, short-term - systemic
Exposure estimate	0,0154 mg/kg bw/day
Risk Characterization Ratio (RCR)	0,001663
	The calculation is based on the external dose.
Assessment method	EASY TRA v4.2, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, long-term - systemic
Exposure estimate	0,2845 mg/m³
Risk Characterization Ratio (RCR)	0,098095
	The exposure calculation is based on the mean concentration on the day of exposure.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC24: Lubricants, Greases and Release Products
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 0,5 %
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	Exposure duration: 60 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	Application duration: 60 min

	Relevant for inhalative exposure estimates
Duration and Frequency of activity	< 1 uses per year
Room size	34 m3
Ventilation rate per hour	1,5
Temperature (Application)	20 °C
body weight	65 kg
	Amount per use 0,25 g Relevant for dermal exposure estimates
Release area	150000 cm²
	Release area increases over time
Release duration	60 min
	Relevant for inhalative exposure estimates
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ConsExpo v4.1, Dermal model: instant application
	Consumer - dermal, short-term - systemic
Exposure estimate	0,0192 mg/kg bw/day
Risk Characterization Ratio (RCR)	0,002079
	The calculation is based on the external dose.
Assessment method	EASY TRA v4.2, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, long-term - systemic
Exposure estimate	0,7813 mg/m³
Risk Characterization Ratio (RCR)	0,269426
	The exposure calculation is based on the mean concentration on the day of exposure.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC31: Polishes and Wax Blends.
Operational conditions	
Concentration of the substance	2-hexyloxyethanol Content: >= 0 % - <= 15 %
Vapour pressure of the substance during use	10 Pa
Duration and Frequency of activity	Exposure duration: 240 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	Application duration: 20 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	197 uses per year
Room size	58 m3
Ventilation rate per hour	0,5
Temperature (Application)	20 °C

body weight	68,8 kg
	Amount per use 0,286 g Relevant for dermal exposure estimates
Release area	320000 cm²
	Release area increases over time
Release duration	20 min
	Relevant for inhalative exposure estimates
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ConsExpo v4.1, Dermal model: instant application
	Consumer - dermal, short-term - systemic
Exposure estimate	0,6235 mg/kg bw/day
Risk Characterization Ratio (RCR)	0,06741
	The calculation is based on the external dose.
Assessment method	EASY TRA v4.2, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, long-term - systemic
Exposure estimate	1,7971 mg/m³
Risk Characterization Ratio (RCR)	0,619694
	The exposure calculation is based on the mean concentration on the day of exposure.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

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