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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: 08.10.2025 Version: 6.0
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Product: **N-PROPANOL**
(ID no. 30034841/SDS_GEN_DE/EN)
Date of print 09.10.2025

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

1.1. Product identifier

N-PROPANOL

Chemical name: propan-1-ol
INDEX-Number: 603-003-00-0
CAS Number: 71-23-8

REACH registration number: 01-2119486761-29-0000, 01-2119486761-29

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

Relevant identified uses: solvent(s)

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
Operating Division Petrochemicals

Telephone: +49 621 60-42151
E-mail address: sds-petrochemicals@basf.com

1.4. Emergency telephone number

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]

Flam. Liq. 2	H225 Highly flammable liquid and vapour.
Eye Dam. 1	H318 Causes serious eye damage.
STOT SE 3	H336 May cause drowsiness or dizziness.

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:

H225	Highly flammable liquid and vapour.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.

Precautionary Statements (Prevention):

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves and eye protection or face protection.

Precautionary Statements (Response):

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or physician.

Precautionary Statements (Storage):

P233	Keep container tightly closed.

Precautionary Statements (Disposal):

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

Hazard determining component(s) for labelling: propan-1-ol

2.3. Other hazards

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

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.
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.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Chemical nature

propan-1-ol

Content (W/W): >= 99,5 %	Flam. Liq. 2
CAS Number: 71-23-8	Eye Dam. 1
EC-Number: 200-746-9	STOT SE 3 (drowsiness and dizziness)
INDEX-Number: 603-003-00-0	H225, H318, H336

Regulatory relevant ingredients

propan-1-ol

Content (W/W): >= 75 % - <= 100 %	Flam. Liq. 2
CAS Number: 71-23-8	Eye Dam. 1
EC-Number: 200-746-9	STOT SE 3 (drowsiness and dizziness)
INDEX-Number: 603-003-00-0	H225, H318, H336

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

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:
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, alcohol-resistant 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: Highly flammable. 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.

Electrical devices must meet the specified temperature class.

Temperature class: T2 (Autoignition temperature >300 °C).

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Storage class according to TRGS 510 (originally VCI, Germany): (3) Flammable liquids

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:
No PNEC value available.

STP:
No PNEC value available.

soil:
No PNEC value available.

sediment (marine water):
No PNEC value available.

sediment (freshwater):
No PNEC value available.

intermittent release:
No PNEC value available.

marine water:
No PNEC value available.

oral (secondary poisoning):
No PNEC oral derived, as accumulation in organisms is not to be expected.

DNEL

worker:
Short-term exposure - systemic effects, Inhalation: 1037 mg/m3

consumer:
Short-term exposure - systemic effects, Inhalation: 518 mg/m3

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

Wearing of closed work clothing is required additionally to the stated personal protection equipment. Avoid inhalation of vapour.

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

Odour:	alcohol-like	
Odour threshold:	not determined	
Melting point:	-127,05 °C (1.013 hPa) Literature data.	
Boiling point:	97 °C (1.013 hPa) Literature data.	
Flammability:	Highly flammable liquid and vapour.	(derived from flash - and boiling point)
Lower explosion limit:	For liquids not relevant for classification and labelling., The lower explosion point may be 5 - 15 °C below the flash point.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Flash point:	21,5 - 25,5 °C	(DIN 51755, closed cup)
Auto-ignition temperature:	400 °C	(DIN 51794)
Thermal decomposition:	No data available.	
pH value:	approx. 7 (200 g/l)	
Viscosity, kinematic:	No data available.	
Viscosity, dynamic:	2,3 mPa.s (20 °C) Literature data.	
Thixotropy:	not thixotropic	
Solubility in water:	miscible (20 °C)	(TRbF 003, Number 2)
Solubility (qualitative) solvent(s):	organic solvents soluble	
Partitioning coefficient n-octanol/water (log Kow):	0,2 (25 °C)	(OECD Guideline 117)
Vapour pressure:	28,2 hPa (25 °C) Literature data.	(measured)
Relative density:	0,8037 (20 °C)	
Density:	0,8037 g/cm3 (20 °C)	(DIN 51757)
Relative vapour density (air):	2,07 (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: not shock-sensitive
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

Corrosive effects to metal are not anticipated.

Other safety characteristics

pKA: 16,1

Adsorption/water - soil: KOC: 4,291; log KOC: 0,633 (calculated)

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

Molar mass: 60,10 g/mol

Other Information: Study technically not feasible.

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:	Corrosive effects to metal are not anticipated.	
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 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:

Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Of low toxicity after short-term skin contact.

Experimental/calculated data:

LD50 rat (oral): approx. 8.000 mg/kg (BASF-Test)
LD50 rat (oral): 1.870 mg/kg (similar to OECD guideline 401)
LD50 rat (oral): 6.500 mg/kg
LC50 rat (by inhalation): > 33,8 mg/l 4 h (OECD Guideline 403)

No mortality was observed. The vapour was tested.
LD50 rabbit (dermal): 4.032 mg/kg (similar to OECD guideline 402)
Literature data.

Irritation

Assessment of irritating effects:

Not irritating to the skin. May cause severe damage to the eyes.

Experimental/calculated data:

Skin corrosion/irritation

rabbit: non-irritant (BASF-Test)

Serious eye damage/irritation

rabbit: irreversible damage (BASF-Test)

Respiratory/Skin sensitization

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies.

Experimental/calculated data:

Guinea pig maximization test guinea pig: Non-sensitizing. (similar to OECD guideline 406)
Literature data.

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.

Developmental toxicity

Assessment of teratogenicity:

The potential to cause toxicity to development cannot be excluded when given in high doses.
Literature data.

Specific target organ toxicity (single exposure)

Assessment of STOT single:
Possible narcotic effects (drowsiness or dizziness).

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

Assessment of repeated dose toxicity:

Repeated inhalative uptake of the substance did not cause substance-related effects.

Aspiration hazard

Some authorities consider isobutyl alcohol, n-primary alcohols and ketones with C3-C13 as "May be harmful if swallowed and enters airways"

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) 4.555 mg/l, Pimephales promelas (Fish test acute, Flow through.)
The statement of the toxic effect relates to the analytically determined concentration. Literature data.

Aquatic invertebrates:
EC50 (48 h) 3.644 mg/l, Daphnia magna (DIN 38412 Part 11, static)
The details of the toxic effect relate to the nominal concentration. Literature data.

Aquatic plants:
No observed effect concentration (48 h) 1.150 mg/l (growth rate), Chlorella sp. (Algal growth inhibition test, static)
The details of the toxic effect relate to the nominal concentration. Literature data.

Microorganisms/Effect on activated sludge:
EC50 (3 h) > 1.000 mg/l, activated sludge, domestic (OECD Guideline 209, aquatic)

Literature data.

Chronic toxicity to fish:
No observed effect concentration (35 d) > 11,58 mg/l, Brachydanio rerio (OECD Guideline 210, Flow through.)
The statement of the toxic effect relates to the analytically determined concentration.

Chronic toxicity to aquatic invertebrates:
No observed effect concentration (21 d) >= 3,22 mg/l, Daphnia magna (OECD Guideline 211, Flow through.)
The statement of the toxic effect relates to the analytically determined concentration.

Assessment of terrestrial toxicity:
No data available concerning terrestrial toxicity.
Study scientifically not justified.

12.2. Persistence and degradability

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

Elimination information:
75 % BOD of the ThOD (20 d) (other) (aerobic, domestic sewage)

Assessment of stability in water:
According to structural properties, hydrolysis is not expected/probable.

Information on Stability in Water (Hydrolysis):
Study scientifically not justified.

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:
Significant accumulation in organisms is not to be expected.

Bioaccumulation potential:
No data available. Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

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 (EU) 2024/590 on substances that deplete the ozone layer.

Results of PMT and vPvM assessment

The substance does not fulfill the PMT criteria. The substance does not fulfill the vPvM criteria.

Additional information

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

Other ecotoxicological advice:
Do not release untreated into natural waters. Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

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

Contaminated packaging:
Uncleaned empties should be disposed of in the same manner as the contents.

SECTION 14: Transport Information

Land transport

ADR

UN number or ID number:	UN1274
UN proper shipping name:	N-PROPANOL (PROPYL ALCOHOL, NORMAL)
Transport hazard class(es):	3
Packing group:	II
Environmental hazards:	no
Special precautions for user:	Tunnel code: D/E

RID

UN number or ID number:	UN1274
UN proper shipping name:	N-PROPANOL (PROPYL ALCOHOL, NORMAL)
Transport hazard class(es):	3
Packing group:	II
Environmental hazards:	no
Special precautions for user:	None known

Inland waterway transport

ADN

UN number or ID number:	UN1274
UN proper shipping name:	N-PROPANOL (PROPYL ALCOHOL, NORMAL)
Transport hazard class(es):	3
Packing group:	II
Environmental hazards:	no
Special precautions for user:	None known

Transport in inland waterway vessel

UN number or ID number:	UN1274
UN proper shipping name:	N-PROPANOL
Transport hazard class(es):	3
Packing group:	II
Environmental hazards:	no
Type of inland waterway vessel:	N
Cargo tank design:	2
Cargo tank type:	2

Sea transport

IMDG

UN number or ID number:	UN 1274
UN proper shipping name:	N-PROPANOL (PROPYL ALCOHOL, NORMAL)
Transport hazard class(es):	3
Packing group:	II
Environmental hazards:	no Marine pollutant: NO
Special precautions for user:	EmS: F-E; S-D

Air transport

IATA/ICAO

UN number or ID number:	UN 1274
UN proper shipping name:	N-PROPANOL
Transport hazard class(es):	3
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

Regulation:	IBC-Code
Product name:	n-Propyl alcohol
Pollution category:	Y
Ship Type:	3

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, 40, 75, 3

Hazardous Incident Ordinance (Germany):
List entry in regulation: 1.2.5.1
Classification applies for standard conditions of temperature and pressure.
List entry in regulation: 1.2.5.2
Classification applies for standard conditions of temperature and pressure.
List entry in regulation: 1.2.5.3
Classification applies for standard conditions of temperature and pressure.

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):
List entry in regulation: P5a
Classification applies for standard conditions of temperature and pressure.
List entry in regulation: P5b
Classification applies for standard conditions of temperature and pressure.
List entry in regulation: P5c
Classification applies for standard conditions of temperature and pressure.

Classification according to 'TA-Luft' (Germany):

5.2.5: Organic gases, general guidance

Water hazard class (§6 AwSV para.4 (Legal binding announcement of the substance in the Federal Gazette)): (1) Weakly water polluting. ID-No.: 176

German Regulation TA Luft (Technical Instruction on Air Quality Control, i.e. first Directive to the Federal Immission Control Ordinance)
Law on the Protection of Working Youth

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. 5 (dermal)
Eye Dam. 1
STOT SE 3 (May cause drowsiness and dizziness.)
Flam. Liq. 2

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

Flam. Liq.	Flammable liquids
Eye Dam.	Serious eye damage
STOT SE	Specific target organ toxicity — single exposure
H225	Highly flammable liquid and vapour.
H318	Causes serious eye damage.
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.

Vertical lines in the left hand margin indicate an amendment from the previous version.

Annex: Exposure Scenarios

Index

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1. Short title of exposure scenario

Use in Cleaning Agents, (consumer use)
C; ERC8a, ERC8d; PC4, PC9a, PC24, PC35, PC38

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
Operational conditions	
Annual amount used in the EU	20.000.000 kg
Minimum emission days per year	365
Emission factor air	100 %
Emission factor water	100 %
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	no STP

Contributing exposure scenario	
Use descriptors covered	ERC8d: Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
Operational conditions	
Annual amount used in the EU	20.000.000 kg
Minimum emission days per year	365
Emission factor air	100 %
Emission factor water	100 %
Emission factor soil	20 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	no STP

Contributing exposure scenario	
Use descriptors covered	PC4: Anti-Freeze and De-icing products. Spraying
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
Duration and Frequency of activity	Exposure duration: 240 min Relevant for inhalative exposure estimates
Room size	58 m3
Ventilation rate per hour	0,5
body weight	65 kg
Spray duration	42 sec
Risk Management Measures	
Consumer Measures	Ensure spraying away from persons.
Exposure estimate and reference to its source	
Assessment method	EASY TRA v6.1, ConsExpo v4.1, Inhalation model: Exposure to spray/dust

	Consumer - inhalation, short-term - systemic
Exposure estimate	0,87 mg/m³
Risk Characterization Ratio (RCR)	0,001679
	The exposure calculation is based on a single use of the product.
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 Paint remover Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 5 %
Vapour pressure of the substance during use	1998,407104 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
Room size	20 m3
Ventilation rate per hour	5
	Use only in sufficiently ventilated rooms.
Temperature (Application)	20 °C
body weight	65 kg
Release area	20000 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 v6.1, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, short-term - systemic
Exposure estimate	400,3955 mg/m³
Risk Characterization Ratio (RCR)	0,772964
	The exposure calculation is based on a single use of the product.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC24_2: Subcategory: Pastes Application
Operational conditions	
Concentration of the substance	propan-1-ol

	Content: >= 0 % - <= 60 %
Vapour pressure of the substance during use	1998,407104 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
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 v6.1, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, short-term - systemic
Exposure estimate	449,4052 mg/m³
Risk Characterization Ratio (RCR)	0,867578
	The exposure calculation is based on a single use of the product.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC8_2, PC35_2: Subcategory: Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners) Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 25 %
Vapour pressure of the substance during use	1998,407104 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
Room size	58 m3
Ventilation rate per hour	5
	Use only in sufficiently ventilated rooms.

Temperature (Application)	20 °C
body weight	65 kg
Release area	100000 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 v6.1, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, short-term - systemic
Exposure estimate	86,1351 mg/m³
Risk Characterization Ratio (RCR)	0,166284
	The exposure calculation is based on a single use of the product.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC8_3, PC35_3: Subcategory: Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) Spraying
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
Duration and Frequency of activity	Exposure duration: 60 min Relevant for inhalative exposure estimates
Room size	15 m3
Ventilation rate per hour	2,5
body weight	65 kg
Spray duration	24,6 sec
Risk Management Measures	
Consumer Measures	Ensure spraying away from persons.
Exposure estimate and reference to its source	
Assessment method	EASY TRA v6.1, ConsExpo v4.1, Inhalation model: Exposure to spray/dust
	Consumer - inhalation, short-term - systemic
Exposure estimate	2,4756 mg/m³
Risk Characterization Ratio (RCR)	0,004779
	The exposure calculation is based on a single use of the product.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC38: Welding and soldering products, flux products. Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
Duration and Frequency of activity	Exposure duration: 60 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	Application duration: 10 min Relevant for inhalative exposure estimates
Room size	15 m3
Ventilation rate per hour	2,5
Temperature (Application)	20 °C
body weight	65 kg
Release area	17100 cm²
	Release area increases over time
Release duration	10 min
	Relevant for inhalative exposure estimates
Exposure estimate and reference to its source	
Assessment method	EASY TRA v6.1, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, short-term - systemic
Exposure estimate	239,097 mg/m³
Risk Characterization Ratio (RCR)	0,461577
	The exposure calculation is based on a single use of the product.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

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2. Short title of exposure scenario

Use in Coatings, (consumer use)
C; ERC8a, ERC8d; PC1, PC4, PC9a, PC15, PC23, PC24

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
Operational conditions	
Annual amount used in the EU	20.000.000 kg

Minimum emission days per year	365
Emission factor air	100 %
Emission factor water	100 %
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	no STP

Contributing exposure scenario	
Use descriptors covered	ERC8d: Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
Operational conditions	
Annual amount used in the EU	20.000.000 kg
Minimum emission days per year	365
Emission factor air	100 %
Emission factor water	100 %
Emission factor soil	20 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	no STP

Contributing exposure scenario	
Use descriptors covered	PC1: Adhesives, Sealants Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 14 %

Vapour pressure of the substance during use	1998,407104 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
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 v6.1, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, short-term - systemic
Exposure estimate	431,1623 mg/m³
Risk Characterization Ratio (RCR)	0,83236
	The exposure calculation is based on a single use of the product.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC4: Anti-Freeze and De-icing products.
	All-purpose cleaning liquid
	Application - cleaning
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 3,5 %
Vapour pressure of the substance during use	1998,407104 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
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 v6.1, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, short-term - systemic
Exposure estimate	330,5376 mg/m³
Risk Characterization Ratio (RCR)	0,638103
	The exposure calculation is based on a single use of the product.
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 Paint remover Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 5 %
Vapour pressure of the substance during use	1998,407104 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
Room size	20 m3
Ventilation rate per hour	5
	Use only in sufficiently ventilated rooms.
Temperature (Application)	20 °C
body weight	65 kg
Release area	20000 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 v6.1, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, short-term - systemic
Exposure estimate	400,3955 mg/m³

Risk Characterization Ratio (RCR)	0,772964
	The exposure calculation is based on a single use of the product.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC15: Non-metal-surface treatment products. Solvent rich paint Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 5 %
Vapour pressure of the substance during use	1998,407104 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
Room size	20 m3
Ventilation rate per hour	5
	Use only in sufficiently ventilated rooms.
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
Exposure estimate and reference to its source	
Assessment method	EASY TRA v6.1, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, short-term - systemic
Exposure estimate	218,8748 mg/m³
Risk Characterization Ratio (RCR)	0,422538
	The exposure calculation is based on a single use of the product.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC23: Leather tanning, dye, finishing, impregnation and care products. Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 3,5 %

Vapour pressure of the substance during use	1998,407104 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
Room size	34 m3
Ventilation rate per hour	5
	Use only in sufficiently ventilated rooms.
Temperature (Application)	20 °C
body weight	65 kg
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 v6.1, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, short-term - systemic
Exposure estimate	494,6063 mg/m³
Risk Characterization Ratio (RCR)	0,954838
	The exposure calculation is based on a single use of the product.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC23: Leather tanning, dye, finishing, impregnation and care products. spray can Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 40 %
Vapour pressure of the substance during use	1998,407104 Pa
Duration and Frequency of activity	Exposure duration: 20 min Relevant for inhalative exposure estimates
Room size	34 m3
Ventilation rate per hour	5
	Use only in sufficiently ventilated rooms.
body weight	65 kg
Spray duration	900 sec
Risk Management Measures	
Consumer Measures	Ensure spraying away from persons.

Exposure estimate and reference to its source	
Assessment method	EASY TRA v6.1, ConsExpo v4.1, Inhalation model: Exposure to spray/dust
	Consumer - inhalation, short-term - systemic
Exposure estimate	430,335 mg/m³
Risk Characterization Ratio (RCR)	0,830763
	The exposure calculation is based on a single use of the product.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC24_2: Subcategory: Pastes Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 60 %
Vapour pressure of the substance during use	1998,407104 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
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 v6.1, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, short-term - systemic
Exposure estimate	449,4052 mg/m³
Risk Characterization Ratio (RCR)	0,867578
	The exposure calculation is based on a single use of the product.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

3. Short title of exposure scenario

Use in Disinfectants, (consumer use)
C; ERC8a; PC8

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
Operational conditions	
Annual amount used in the EU	20.000.000 kg
Minimum emission days per year	365
Emission factor air	100 %
Emission factor water	100 %
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	no STP

Contributing exposure scenario	
Use descriptors covered	PC8: Biocidal Products. Spraying
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
Duration and Frequency of activity	Exposure duration: 60 min Relevant for inhalative exposure estimates
Room size	15 m3
Ventilation rate per hour	2,5
body weight	65 kg
Spray duration	30,6 sec
Risk Management Measures	

Consumer Measures	Ensure spraying away from persons.
Exposure estimate and reference to its source	
Assessment method	EASY TRA v6.1, ConsExpo v4.1, Inhalation model: Exposure to spray/dust
	Consumer - inhalation, short-term - systemic
Exposure estimate	2,0495 mg/m³
Risk Characterization Ratio (RCR)	0,003957
	The exposure calculation is based on a single use of the product.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC8: Biocidal Products. Wiping
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
body weight	65 kg
	Amount per use 0,02 g Relevant for dermal exposure estimates
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

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4. Short title of exposure scenario

Use in Lubricants, (consumer use)
C; ERC8a, ERC8d, ERC9a, ERC9b; PC24, PC31

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
Operational conditions	
Annual amount used in the EU	20.000.000 kg
Minimum emission days per year	365
Emission factor air	100 %

Emission factor water	100 %
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	no STP

Contributing exposure scenario	
Use descriptors covered	ERC8d: Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
Operational conditions	
Annual amount used in the EU	20.000.000 kg
Minimum emission days per year	365
Emission factor air	100 %
Emission factor water	100 %
Emission factor soil	20 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	no STP

Contributing exposure scenario	
Use descriptors covered	ERC9a: Widespread use of functional fluid (indoor)
Operational conditions	
Annual amount used in the EU	20.000.000 kg
Minimum emission days per year	365
Emission factor air	5 %
Emission factor water	5 %

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	no STP

Contributing exposure scenario	
Use descriptors covered	ERC9b: Widespread use of functional fluid (outdoor)
Operational conditions	
Annual amount used in the EU	20.000.000 kg
Minimum emission days per year	365
Emission factor air	5 %
Emission factor water	5 %
Emission factor soil	5 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	no STP

Contributing exposure scenario	
Use descriptors covered	PC24_2: Subcategory: Pastes Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 60 %
Vapour pressure of the substance during use	1998,407104 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
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 v6.1, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, short-term - systemic
Exposure estimate	449,4052 mg/m³
Risk Characterization Ratio (RCR)	0,867578
	The exposure calculation is based on a single use of the product.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC23_1, PC31_1: Subcategory: Polishes, wax / cream (floor, furniture, shoes) Shoe polish cream Application - polishing
	Shoe polish cream
	Application - polishing
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
Duration and Frequency of activity	Exposure duration: 240 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	Application duration: 5 min Relevant for inhalative exposure estimates
Room size	58 m3
Ventilation rate per hour	0,5
Temperature (Application)	20 °C
body weight	68,8 kg
	Amount per use 1,3 g Relevant for dermal exposure estimates
Release area	4800 cm²
	Release area increases over time

Release duration	5 min
	Relevant for inhalative exposure estimates
Exposure estimate and reference to its source	
Assessment method	EASY TRA v6.1, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, short-term - systemic
Exposure estimate	206,1393 mg/m³
Risk Characterization Ratio (RCR)	0,397952
	The exposure calculation is based on a single use of the product.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

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5. Short title of exposure scenario

Use in Personal care products, Use in Disinfectants
C; ERC8a, ERC8d; PC28, PC35, PC39

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
Operational conditions	
Annual amount used in the EU	20.000.000 kg
Minimum emission days per year	365
Emission factor air	100 %
Emission factor water	100 %
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	no STP

Contributing exposure scenario	
Use descriptors covered	ERC8d: Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)

Operational conditions	
Annual amount used in the EU	20.000.000 kg
Minimum emission days per year	365
Emission factor air	100 %
Emission factor water	100 %
Emission factor soil	20 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	no STP

Contributing exposure scenario	
Use descriptors covered	PC28: Perfumes, Fragrances. Eau de toilette Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
Duration and Frequency of activity	Exposure duration: 5 min Relevant for inhalative exposure estimates
Room size	10 m3
Ventilation rate per hour	2
body weight	65 kg
Spray duration	4,8 sec
Exposure estimate and reference to its source	
Assessment method	EASY TRA v6.1, ConsExpo v4.1, Inhalation model: Exposure to spray/dust
	Consumer - inhalation, short-term - systemic
Exposure estimate	1,2585 mg/m³
Risk Characterization Ratio (RCR)	0,00243
	The exposure calculation is based on a single use of the product.
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). Soap liquid Application: showering
	Soap liquid
	Application: showering
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
body weight	65 kg
	Amount per use 26,1 g Relevant for dermal exposure estimates
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). Soap liquid Application: washing hands
	Soap liquid
	Application: washing hands
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
body weight	65 kg
	Amount per use 3 g Relevant for dermal exposure estimates
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). Hair shampoo Application

Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
body weight	65 kg
	Amount per use 60 g Relevant for dermal exposure estimates
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). Mouthwash Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
body weight	65 kg
	Amount ingested 1 g Relevant for oral exposure estimates
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC39: Cosmetics, personal care products. Body lotion Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
body weight	61 kg
	Amount per use 8 g Relevant for dermal exposure estimates
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC39: Cosmetics, personal care products.

	Lipstick, lip salve Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
Duration and Frequency of activity	1.460 uses per year
body weight	61 kg
Uptake fraction oral	100 % Relevant for oral exposure estimates
	Relevant for oral exposure estimates
	Amount ingested 0,01 g Relevant for oral exposure estimates
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC39: Cosmetics, personal care products. Deodorant spray Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 70 %
Vapour pressure of the substance during use	1998,407104 Pa
Duration and Frequency of activity	Exposure duration: 5 min Relevant for inhalative exposure estimates
Room size	10 m3
Ventilation rate per hour	2
body weight	65 kg
Spray duration	10,2 sec
Exposure estimate and reference to its source	
Assessment method	EASY TRA v6.1, ConsExpo v4.1, Inhalation model: Exposure to spray/dust
	Consumer - inhalation, short-term - systemic
Exposure estimate	288,959 mg/m³
Risk Characterization Ratio (RCR)	0,557836
	The exposure calculation is based on a single use of the product.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario

Use descriptors covered	PC39: Cosmetics, personal care products. Hair dye Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
body weight	65 kg
	Amount per use 100 g Relevant for dermal exposure estimates
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC39: Cosmetics, personal care products. Facial makeup Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
body weight	61 kg
	Amount per use 0,8 g Relevant for dermal exposure estimates
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC39: Cosmetics, personal care products. Nail polish Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
Duration and Frequency of activity	Exposure duration: 5 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	Application duration: 5 min Relevant for inhalative exposure estimates
Room size	1 m3
Ventilation rate per hour	1

Temperature (Application)	20 °C
body weight	61 kg
Release area	19 cm²
	Release area is constant
Release duration	5 min
	Relevant for inhalative exposure estimates
Exposure estimate and reference to its source	
Assessment method	EASY TRA v6.1, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, short-term - systemic
Exposure estimate	37,5577 mg/m³
Risk Characterization Ratio (RCR)	0,072505
	The exposure calculation is based on a single use of the product.
Guidance to Downstream Users	
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp	

Contributing exposure scenario	
Use descriptors covered	PC39: Cosmetics, personal care products. Nail polish remover Application
Operational conditions	
Concentration of the substance	propan-1-ol Content: >= 0 % - <= 100 %
Vapour pressure of the substance during use	1998,407104 Pa
Duration and Frequency of activity	Exposure duration: 5 min Relevant for inhalative exposure estimates
Duration and Frequency of activity	Application duration: 5 min Relevant for inhalative exposure estimates
Room size	1 m3
Ventilation rate per hour	1
Temperature (Application)	20 °C
body weight	61 kg
Release area	25 cm²
	Release area is constant
Release duration	5 min
	Relevant for inhalative exposure estimates
Exposure estimate and reference to its source	
Assessment method	EASY TRA v6.1, ConsExpo v4.1, Inhalation model: exposure to vapour - evaporation
	Consumer - inhalation, short-term - systemic
Exposure estimate	49,41 mg/m³
Risk Characterization Ratio (RCR)	0,095386
	The exposure calculation is based on a single use of the product.

Guidance to Downstream Users
For scaling see: http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp

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