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

1.1 Product identifiers

Product name : Benzyl alcohol

Product Number : BA890
Brand : 6Science
Index-No. : 603-057-00-5
REACH No. : 01-2119492630-38-XXXX
CAS-No. : 100-51-6

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : 6Science LTD
Unit 2 Welby Grange Business Park
Welby Lane
Melton Mowbary
Leicestershire
LE143EF
United Kingdom

Telephone : +44 (0)115 7790196
E-mail address : info@6science.co.uk

1.4 Emergency telephone number

Emergency Phone # : +44 (0)870 8200418 (CHEMTREC)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

Acute toxicity, (Category 4)	H302: Harmful if swallowed.
Acute toxicity, (Category 4)	H332: Harmful if inhaled.
Eye irritation, (Category 2)	H319: Causes serious eye irritation.
Skin sensitisation, (Sub-category 1B)	H317: May cause an allergic skin reaction.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

Pictogram

Signal Word	Warning
Hazard Statements	
H302 + H332	Harmful if swallowed or if inhaled.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
Precautionary Statements	
P261	Avoid breathing mist or vapours.
P280	Wear protective gloves/ eye protection/ face protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	none

Reduced Labelling (<= 125 ml)

Pictogram

Signal Word	Warning
Hazard Statements	
H317	May cause an allergic skin reaction.
Precautionary Statements	
P261	Avoid breathing mist or vapours.
P302 + P352	IF ON SKIN: Wash with plenty of water.
Supplemental Hazard Statements	none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Toxicological information:
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : Benzenemethanol

Formula : C_7H_8O
Molecular weight : 108.14 g/mol
CAS-No. : 100-51-6
EC-No. : 202-859-9
Index-No. : 603-057-00-5

Component		Classification	Concentration
Benzyl alcohol			
CAS-No. EC-No. Index-No.	100-51-6 202-859-9 603-057-00-5	Acute Tox. 4; Eye Irrit. 2; Skin Sens. 1B; H302, H332, H319, H317	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice
Show this safety data sheet to the doctor in attendance.

If inhaled
After inhalation: fresh air. If breathing stops: mouth-to-mouth breathing or artificial respiration. Oxygen if necessary. Immediately call in physician.

In case of skin contact
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

In case of eye contact
After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed
After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media
For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides
Combustible.
Vapours are heavier than air and may spread along floors.
Forms explosive mixtures with air on intense heating.
Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Hygiene measures
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions
Tightly closed.

hygroscopic

Storage class
Storage class (TRGS 510): 10: Combustible liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters
Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment

Eye/face protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Full contact
Material: butyl-rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Butoject® (KCL 898)

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Splash contact
Material: VitonÆ
Minimum layer thickness: 0.7 mm
Break through time: 120 min

Body Protection
protective clothing

Respiratory protection
Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Control of environmental exposure
Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a)	Physical state	liquid
b)	Color	No data available

c)	Odor	No data available
d)	Melting point/freezing point	Melting point/ range: -16 - -13 °C - lit.
e)	Initial boiling point and boiling range	205 °C
f)	Flammability (solid, gas)	No data available
g)	Upper/lower flammability or explosive limits	Upper explosion limit: 13 %(V) - Information taken from reference works and the literature. Lower explosion limit: 1.3 %(V) - Information taken from reference works and the literature.
h)	Flash point	101 °C - DIN 51758
i)	Autoignition temperature	No data available
j)	Decomposition temperature	No data available
k)	pH	No data available
l)	Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
m)	Water solubility	No data available
n)	Partition coefficient: n-octanol/water	log Pow: 1.05 at 20 °C - Bioaccumulation is not expected.
o)	Vapor pressure	No data available
p)	Density	1.045 g/cm3 at 25 °C - lit.
	Relative density	No data available
q)	Relative vapour density	No data available
r)	Particle characteristics	No data available
s)	Explosive properties	Not classified as explosive.
t)	Oxidizing properties	none

9.2 Other safety information

Dissociation constant	15.4 at 25 °C

SECTION 10: Stability and reactivity

10.1 Reactivity

Forms explosive mixtures with air on intense heating.
A range from approx. 15 Kelvin below the flash point is to be rated as critical.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
Strong heating.

10.5 Incompatible materials
No data available

10.6 Hazardous decomposition products
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
Acute toxicity estimate Oral - 1,200 mg/kg
(Acute toxicity estimate)
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
LC50 Inhalation - 4 h - > 4.178 mg/l - dust/mist

(OECD Test Guideline 403)
Dermal: No data available

Skin corrosion/irritation
Skin - Rabbit
Result: No skin irritation - 4 h
(OECD Test Guideline 404)

Serious eye damage/eye irritation
Eyes - Rabbit
Result: irritating
(OECD Test Guideline 405)

Respiratory or skin sensitization
Open epicutaneous test - Guinea pig
Result: positive
The product is a skin sensitiser, sub-category 1B.
(OECD Test Guideline 429)
Remarks: (Regulation (EC) No 1272/2008, Annex VI)

Germ cell mutagenicity

Test Type: Micronucleus test
Species: Mouse
Cell type: Red blood cells (erythrocytes)
Application Route: Intraperitoneal
Method: OECD Test Guideline 474
Result: negative

Carcinogenicity
No data available

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

11.2 Additional Information

Endocrine disrupting properties

Product:

Assessment	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Central nervous system depression
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish	static test LC50 - Pimephales promelas (fathead minnow) - 460 mg/l - 96 h (US-EPA)
Toxicity to daphnia and other aquatic invertebrates	Immobilization EC50 - Daphnia magna (Water flea) - 230 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 700 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	semi-static test NOEC - Daphnia magna (Water flea) - 51 mg/l - 21 d (OECD Test Guideline 211)

12.2 Persistence and degradability

Biodegradability	aerobic - Exposure time 14 d Result: 92 - 96 % - Readily biodegradable. (OECD Test Guideline 301C)
Biochemical Oxygen Demand (BOD)	1,550 mg/g Remarks: (Lit.)
Theoretical oxygen demand	2,515 mg/g Remarks: (IUCLID)
Ratio BOD/ThBOD	62 % Remarks: (Lit.)

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at

levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. Notice Directive on waste 2008/98/EC.

SECTION 14: Transport information

14.1 UN number

ADR/RID: - IMDG: - IATA: 3334

14.2 UN proper shipping name

ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Aviation regulated liquid, n.o.s. (Benzyl alcohol)

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: 9

14.4 Packaging group

ADR/RID: - IMDG: - IATA: III

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

No data available

Further information : No data available

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Authorisations and/or restrictions on use

Other regulations
Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

15.2 Chemical safety assessment
A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Full text of H-Statements

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further information

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. 6Science LTD shall not be held liable for any damage resulting from handling or from contactwith the above product.

Annex: Exposure scenario

Identified uses:

Use: Industrial use

SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites
SU 3, SU9, SU 10: Industrial uses: Uses of substances as such or in preparations at industrial sites, Manufacture of fine chemicals, Formulation [mixing] of preparations and/ or re-packaging (excluding alloys)
PC19: Intermediate **PC21:** Laboratory chemicals **PC39:** Cosmetics, personal care products
PROC1: Use in closed process, no likelihood of exposure **PROC2:** Use in closed, continuous process with occasional controlled exposure **PROC3:** Use in closed batch process (synthesis or formulation) **PROC4:** Use in batch and other process (synthesis) where opportunity for exposure arises **PROC5:** Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact) **PROC8a:** Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities **PROC8b:** Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities **PROC9:** Transfer of substance or preparation into small containers (dedicated filling line, including weighing) **PROC10:** Roller application or brushing **PROC14:** Production of preparations or articles by tabletting, compression, extrusion, pelletisation **PROC15:** Use as laboratory reagent
ERC1, ERC2, ERC4, ERC6a, ERC6b: Manufacture of substances, Formulation of preparations, Industrial use of processing aids in processes and products, not becoming part of articles, Industrial use resulting in manufacture of another substance (use of intermediates), Industrial use of reactive processing aids

Use: Professional use

SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
PC21: Laboratory chemicals **PC39:** Cosmetics, personal care products
PROC15: Use as laboratory reagent
ERC2, ERC6a, ERC6b, ERC8a, ERC8d: Formulation of preparations, Industrial use resulting in manufacture of another substance (use of intermediates), Industrial use of reactive processing aids, Wide dispersive indoor use of processing aids in open systems, Wide dispersive outdoor use of processing aids in open systems

Use: Consumer use

SU 21: Consumer uses: Private households (= general public = consumers)
SU 21: Consumer uses: Private households (= general public = consumers)
PC39: Cosmetics, personal care products
ERC8a, ERC8d: Wide dispersive indoor use of processing aids in open systems, Wide dispersive outdoor use of processing aids in open systems

1. Short title of Exposure Scenario: Industrial use

Main User Groups	:	**SU 3**
Sectors of end-use	:	**SU 3, SU9, SU 10**
Chemical product category	:	**PC19, PC21, PC39**
Process categories	:	**PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC10, PROC14, PROC15**
Environmental Release Categories	:	**ERC1, ERC2, ERC4, ERC6a, ERC6b:**

2. Exposure scenario

2.1 Contributing scenario controlling environmental exposure for: ERC1, SpERC ESVOC 1

Amount used

Annual amount per site	:	100 t

Environment factors not influenced by risk management

Dilution Factor (River)	:	10
Dilution Factor (Coastal Areas)	:	100

Other given operational conditions affecting environmental exposure

Number of emission days per year	:	300
Emission or Release Factor: Air	:	0.01 %
Emission or Release Factor: Water	:	1 %
Emission or Release Factor: Soil	:	0.01 %

Conditions and measures related to municipal sewage treatment plant

Type of Sewage Treatment Plant	:	Municipal sewage treatment plant
Flow rate of sewage treatment plant effluent	:	2,000 m3/d
Effectiveness (of a measure)	:	87.4 %

2.1 Contributing scenario controlling environmental exposure for: ERC2

Amount used

Annual amount per site	:	1000 t

Environment factors not influenced by risk management

Dilution Factor (River)	:	10
Dilution Factor (Coastal Areas)	:	100

Other given operational conditions affecting environmental exposure

Number of emission days per year : 100
Emission or Release Factor: Air : 0.25 %
Emission or Release Factor: Water : 0.5 %
Emission or Release Factor: Soil : 0.01 %

Conditions and measures related to municipal sewage treatment plant
Type of Sewage Treatment Plant : Municipal sewage treatment plant
Flow rate of sewage treatment plant effluent : 2,000 m3/d
Effectiveness (of a measure) : 87.4 %

2.1 Contributing scenario controlling environmental exposure for: ERC4, SpERC ESVOC 3

Amount used
Annual amount per site : 500 t

Environment factors not influenced by risk management
Dilution Factor (River) : 10
Dilution Factor (Coastal Areas) : 100

Other given operational conditions affecting environmental exposure
Number of emission days per year : 300
Emission or Release Factor: Air : 0.001 %
Emission or Release Factor: Water : 0.001 %
Emission or Release Factor: Soil : 0 %

Conditions and measures related to municipal sewage treatment plant
Type of Sewage Treatment Plant : Municipal sewage treatment plant
Flow rate of sewage treatment plant effluent : 2,000 m3/d
Effectiveness (of a measure) : 87.4 %

2.1 Contributing scenario controlling environmental exposure for: ERC6a

Amount used
Annual amount per site : 100 t

Environment factors not influenced by risk management
Dilution Factor (River) : 10
Dilution Factor (Coastal Areas) : 100

Other given operational conditions affecting environmental exposure
Number of emission days per year : 20

Conditions and measures related to municipal sewage treatment plant
Type of Sewage Treatment Plant : Municipal sewage treatment plant
Flow rate of sewage treatment plant effluent : 2,000 m3/d
Effectiveness (of a measure) : 87.4 %

2.1 Contributing scenario controlling environmental exposure for: ERC6b, SpERC ESVOC 8

Amount used
Annual amount per site : 200 t

Environment factors not influenced by risk management
Dilution Factor (River) : 10

Dilution Factor (Coastal Areas) : 100

Other given operational conditions affecting environmental exposure

Number of emission days per year : 20
Emission or Release Factor: Air : 30 %
Emission or Release Factor: Water : 0.01 %
Emission or Release Factor: Soil : 0 %

Conditions and measures related to municipal sewage treatment plant

Type of Sewage Treatment Plant : Municipal sewage treatment plant
Flow rate of sewage treatment plant effluent : 2,000 m3/d
Effectiveness (of a measure) : 87.4 %

2.6 Contributing scenario controlling worker exposure for: PROC1, PROC2, PROC3, PROC4, PROC9, PROC14, PROC15

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).
Physical Form (at time of use) : Low volatile liquid
Process Temperature : < 69 °C

Frequency and duration of use

Frequency of use : 8 hours/day

Other operational conditions affecting workers exposure

Outdoor / Indoor : Indoor without local exhaust ventilation (LEV)

Organisational measures to prevent /limit releases, dispersion and exposure

Covers daily exposures up to 8 hours.

Conditions and measures related to personal protection, hygiene and health evaluation

Use suitable eye protection.

2.7 Contributing scenario controlling worker exposure for: PROC5, PROC8a, PROC8b, PROC10

Product characteristics

Concentration of the Substance in Mixture/Article : Covers the percentage of the substance in the product up to 100 % (unless stated differently).
Physical Form (at time of use) : Low volatile liquid
Process Temperature : < 69 °C

Frequency and duration of use

Frequency of use : 8 hours/day

Other operational conditions affecting workers exposure

Outdoor / Indoor : Indoor without local exhaust ventilation (LEV)

Organisational measures to prevent /limit releases, dispersion and exposure

Covers daily exposures up to 8 hours.

Conditions and measures related to personal protection, hygiene and health evaluation

Use suitable eye protection., Wear suitable gloves tested to EN374.

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR*
ERC1	EUSES		All compartments			< 1
ERC2	EUSES		All compartments			< 1
ERC4	EUSES		All compartments			< 1
ERC6a	EUSES		All compartments			< 1
ERC6b	EUSES		All compartments			< 1

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR*
PROC1	ECETOC TRA				< 1
PROC2	ECETOC TRA				< 1
PROC3	ECETOC TRA				< 1
PROC4	ECETOC TRA				< 1
PROC9	ECETOC TRA				< 1
PROC14	ECETOC TRA				< 1
PROC15	ECETOC TRA				< 1
PROC5	ECETOC TRA, modified				< 1
PROC8a	ECETOC TRA, modified				< 1
PROC8b	ECETOC TRA, modified				< 1
PROC10	ECETOC TRA, modified				< 1

*Risk characterisation ratio

*Risk characterisation ratio

1. Short title of Exposure Scenario: Professional use

Main User Groups	: **SU 22**
Sectors of end-use	: **SU 22**
Chemical product category	: **PC21, PC39**
Process categories	: **PROC15**
Environmental Release Categories	: **ERC2, ERC6a, ERC6b, ERC8a, ERC8d:**

2. Exposure scenario

2.1 Contributing scenario controlling environmental exposure for: ERC2

Amount used

Annual amount per site	: 1000 t

Environment factors not influenced by risk management

Dilution Factor (River)	: 10
Dilution Factor (Coastal Areas)	: 100

Other given operational conditions affecting environmental exposure

Number of emission days per year	: 100
Emission or Release Factor: Air	: 0.25 %
Emission or Release Factor: Water	: 0.5 %
Emission or Release Factor: Soil	: 0.01 %

Conditions and measures related to municipal sewage treatment plant

Type of Sewage Treatment Plant	: Municipal sewage treatment plant
Flow rate of sewage treatment plant effluent	: 2,000 m3/d
Effectiveness (of a measure)	: 87.4 %

2.1 Contributing scenario controlling environmental exposure for: ERC6a

Amount used

Annual amount per site	: 100 t

Environment factors not influenced by risk management

Dilution Factor (River)	: 10
Dilution Factor (Coastal Areas)	: 100

Other given operational conditions affecting environmental exposure

Number of emission days per year	: 20

Conditions and measures related to municipal sewage treatment plant

Type of Sewage Treatment Plant	: Municipal sewage treatment plant
Flow rate of sewage treatment plant effluent	: 2,000 m3/d
Effectiveness (of a measure)	: 87.4 %

2.1 Contributing scenario controlling environmental exposure for: ERC6b, SpERC ESVOC 8

Amount used

Annual amount per site	: 200 t

Environment factors not influenced by risk management

Dilution Factor (River)	: 10
Dilution Factor (Coastal Areas)	: 100

Other given operational conditions affecting environmental exposure

Number of emission days per year	: 20
Emission or Release Factor: Air	: 30 %
Emission or Release Factor: Water	: 0.01 %
Emission or Release Factor: Soil	: 0 %

Conditions and measures related to municipal sewage treatment plant

Type of Sewage Treatment Plant	: Municipal sewage treatment plant
Flow rate of sewage treatment plant effluent	: 2,000 m3/d
Effectiveness (of a measure)	: 87.4 %

2.1 Contributing scenario controlling environmental exposure for: ERC8a, ERC8d

Amount used

Annual amount per site	: 1000 t

Environment factors not influenced by risk management

Dilution Factor (River)	: 10
Dilution Factor (Coastal Areas)	: 100

Other given operational conditions affecting environmental exposure

Number of emission days per year	: 365

Conditions and measures related to municipal sewage treatment plant

Type of Sewage Treatment Plant	: Municipal sewage treatment plant
Flow rate of sewage treatment plant effluent	: 2,000 m3/d
Effectiveness (of a measure)	: 87.4 %

2.5 Contributing scenario controlling worker exposure for: PROC15

Product characteristics

Concentration of the Substance in Mixture/Article	: Covers the percentage of the substance in the product up to 100 % (unless stated differently).
Physical Form (at time of use)	: Low volatile liquid
Process Temperature	: < 69 °C

Frequency and duration of use

Frequency of use	: 8 hours/day

Other operational conditions affecting workers exposure

Outdoor / Indoor	: Indoor without local exhaust ventilation (LEV)

Organisational measures to prevent /limit releases, dispersion and exposure

Covers daily exposures up to 8 hours.

Conditions and measures related to personal protection, hygiene and health evaluation
Use suitable eye protection.

3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR*
ERC2	EUSES		All compartments			< 1
ERC6a	EUSES		All compartments			< 1
ERC6b	EUSES		All compartments			< 1
ERC8a	EUSES		All compartments			< 1

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Value	Level of Exposure	RCR*
PROC15	ECETOC TRA				< 1

*Risk characterisation ratio

1. Short title of Exposure Scenario: Consumer use

Main User Groups : **SU 21**
Sectors of end-use : **SU 21**
Chemical product category : **PC39**
Environmental Release Categories : **ERC8a, ERC8d:**

2. Exposure scenario

2.1 Contributing scenario controlling environmental exposure for: ERC8a, ERC8d

Amount used
Annual amount per site : 1000 t

Environment factors not influenced by risk management
Dilution Factor (River) : 10
Dilution Factor (Coastal Areas) : 100

Other given operational conditions affecting environmental exposure
Number of emission days per year : 365

Conditions and measures related to municipal sewage treatment plant
Type of Sewage Treatment Plant : Municipal sewage treatment plant
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3. Exposure estimation and reference to its source

Environment

Contributing Scenario	Exposure Assessment Method	Specific conditions	Compartment	Value	Level of Exposure	RCR*
ERC8a	EUSES		All compartments			< 1

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

Please refer to the following documents: ECHA Guidance on information requirements and chemical safety assessment Chapter R.12: Use descriptor system; ECHA Guidance for downstream users; ECHA Guidance on information requirements and chemical safety assessment Part D: Exposure Scenario Building, Part E: Risk Characterisation and Part G: Extending the SDS; VCI/Cefic REACH Practical Guides on Exposure Assessment and Communications in the Supply Chain; CEFIC Guidance Specific Environmental Release Categories (SPERCs).