

Safety Data Sheet

Conforms to – Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II,
as amended by UK SI 2021/904

SUPERSOAP

Date of first edition: 1/5/2026

Safety Data Sheet dated 05/01/2026 version 1

kerakoll

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

1.1. Product identifier

Mixture identification:

Trade name: SUPERSOAP

Trade code: S100B0123

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

Recommended use: detergent

Uses advised against: All uses other than recommended ones

1.3. Details of the supplier of the safety data sheet

Kerakoll UK Ltd

Tomlinson Road, Leyland, Lancashire, PR25 2DY,

United Kingdom

Tel. 01772 456831

safety@kerakoll.co.uk

1.4. Emergency telephone number

UK National Poisons Information Service.

E-mail: npis.birmingham@nhs.net; Tel: +44 (0)344 892 0111

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

GB CLP regulation:

Eye Irrit. 2 Causes serious eye irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

GB CLP regulation:

Hazard pictograms and Signal Word



Warning

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves and eye protection.

P305+P351+P33 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

Contains

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) May produce an allergic reaction.

Detergents (Amendment) (EU Exit) Regulations

Product contents:

Date 07/01/2026

Production Name SUPERSOAP

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non-ionic surfactants	< 5%
soap	< 5%
anionic surfactants	< 5%
Perfumes	< 5%

Preservatives:

Methylchloroisothiazolinone and methylisothiazolinone
2-bromo-2-nitropropane-1,3-diol

Special provisions according to Annex XVII of UK REACH:

None.

2.3. Other hazards

When mixtures containing cement react with water, for instance when making concrete or mortar, or when the cement becomes wet, a strong alkaline solution is produced (high pH caused by the formation of calcium, sodium and potassium hydroxides).

Cement and mixtures containing cement may irritate the eyes, the mucous system, the throat and the respiratory system and cause coughing. Frequent inhalation of cement dust or mixtures containing cement over a long period of time increases the risk of developing lung diseases.

In case of prolonged contact with the skin, both cement and mixtures containing cement, including pastes, may cause skin sensitisation due to the presence of trace amounts of chromium VI salts. Where necessary, such an effect can be minimized by incorporating a special reducing agent to maintain the water-soluble chromium VI content to concentration rates below 0.0002% (2 ppm) on the total dry weight of cement.

No PBT or vPvB substances present in concentration >= 0.1%

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: SUPERSOAP

Hazardous components within the meaning of GB CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
≥1-<3 %	Sodium sulfate	CAS:126-92-1 EC:204-812-8	Skin Irrit. 2, H315; Eye Dam. 1, H318	
<0.05 %	ethanol; ethyl alcohol	CAS:64-17-5 EC:200-578-6 Index:603-002-00-5	Flam. Liq. 2, H225; Eye Irrit. 2, H319	
<0.036 %	propan-2-ol; isopropyl alcohol; isopropanol	CAS:67-63-0 EC:200-661-7 Index:603-117-00-0	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	
<0.0015 %	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS:55965-84-9 Index:613-167-00-5	Acute Tox. 2, H330; Acute Tox. 2, H310; Acute Tox. 3, H301; Skin Corr. 1C, H314; Eye Dam. 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M-Chronic:100, M-Acute:100, EUH071	
<0.0015 %	DIPHENYL ETHER	CAS:101-84-8 EC:202-981-2	Eye Irrit. 2, H319; Aquatic Chronic 2, H411	

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Eye irritation

Eye damages

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

The product must be stored in waterproof, dry, clean conditions and protected from contamination. Do not use aluminium containers due to incompatibility of the materials.

The product contains cement with an addition of a Chromium reducing agent (VI) and its effectiveness decreases with time. Consequently, packaging's of the material indicate information about the production date, storing conditions and the appropriate storage period for the maintaining of the activity of the reducing agent and for maintaining the soluble Chromium (VI) amount under 2ppm over the total dry weight referred to cement (BS EN 196-10).

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
ethanol; ethyl alcohol CAS: 64-17-5	ACGIH		Short Term: 1000 ppm A3 - URT irr
	WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 1920 mg/m ³ - 1000 ppm Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
propan-2-ol; isopropyl alcohol; isopropanol CAS: 67-63-0	ACGIH		Long Term: 200 ppm (8h); Short Term: 400 ppm A4, BEI - Eye and URT irr, CNS impair
	WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 999 mg/m ³ - 400 ppm; Short Term: 1250 mg/m ³ - 500 ppm Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
Bornan-2-one CAS: 76-22-2	ACGIH		Long Term: 2 ppm (8h); Short Term: 3 ppm A4 - Eye and URT irr, anosmia
DIPHENYL ETHER CAS: 101-84-8	ACGIH		Long Term: 1 ppm (8h); Short Term: 2 ppm V - URT and eye irr, nausea
	WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 7 mg/m ³ - 1 ppm; Short Term: 14 mg/m ³ - 2 ppm Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)

Biological limit values

propan-2-ol; isopropyl alcohol; isopropanol
CAS: 67-63-0 Biological Indicator: Acetone; Sampling Period: End of turn
Value: 25 mg/L; Medium: Urine

Biological Indicator: Acetone; Sampling Period: End of turn
Value: 25 mg/L; Medium: Blood

Predicted No Effect Concentration (PNEC) values

ethanol; ethyl alcohol
CAS: 64-17-5 Exposure Route: Fresh Water; PNEC Limit: 960 µg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 2.75 mg/l

Exposure Route: Marine water; PNEC Limit: 790 µg/l

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 580 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 3.6 mg/kg

Exposure Route: Marine water sediments; PNEC Limit: 2.9 mg/kg

Exposure Route: Soil; PNEC Limit: 630 µg/kg

Exposure Route: Secondary poisoning; PNEC Limit: 550 mg/kg

propan-2-ol; isopropyl alcohol; isopropanol
CAS: 67-63-0 Exposure Route: Fresh Water; PNEC Limit: 140.9 mg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 140.9 mg/l

Exposure Route: Marine water; PNEC Limit: 140.9 mg/l
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 2251 mg/l
Exposure Route: Freshwater sediments; PNEC Limit: 552 mg/kg
Exposure Route: Marine water sediments; PNEC Limit: 552 mg/kg
Exposure Route: Soil; PNEC Limit: 28 mg/kg
Exposure Route: Secondary poisoning; PNEC Limit: 160 mg/kg
Exposure Route: Fresh Water; PNEC Limit: 3.39 µg/l

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
CAS: 55965-84-9

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 3.39 µg/l
Exposure Route: Marine water; PNEC Limit: 3.39 µg/l
Exposure Route: Intermittent releases (marine water); PNEC Limit: 3.39 µg/l
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 230 µg/l
Exposure Route: Freshwater sediments; PNEC Limit: 27 µg/l
Exposure Route: Marine water sediments; PNEC Limit: 27 µg/l
Exposure Route: Soil; PNEC Limit: 10 µg/l

Derived No Effect Level (DNEL) values

ethanol; ethyl alcohol
CAS: 64-17-5

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 950 mg/m³; Consumer: 114 mg/m³
Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Professional: 1900 mg/m³; Consumer: 950 mg/m³
Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 343 mg/kg; Consumer: 206 mg/kg
Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 87 mg/kg

propan-2-ol; isopropyl alcohol; isopropanol
CAS: 67-63-0

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Consumer: 89 mg/m³
Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Consumer: 319 mg/kg
Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 26 mg/kg

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
CAS: 55965-84-9

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Professional: 40 µg/m³; Consumer: 20 µg/m³
Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 90 µg/kg
Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects
Consumer: 110 µg/kg

8.2. Exposure controls

Eye protection:

Eye glasses with side protection.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Nitrile rubber, Viton, 4H .

Respiratory protection:

N.A.

Thermal Hazards:

Not expected if used as intended

Environmental exposure controls:

Prevent the product from entering sewers or surface and underground water.

Hygienic and Technical measures

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State: Liquid

Appearance and colour: Liquid White

Odour: Characteristic

Odour threshold: N.A.

pH: 8.00

Melting point / freezing point: N.A.

Initial boiling point and boiling range: 100 °C (212 °F)

Flash point: > 93°C

Evaporation rate: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: 23.00 (kPa 50°C). hPa

Relative density: 0.99 g/cm³

Solubility in water: Soluble

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Solid/gas flammability: N.A.

Volatile Organic compounds - VOCs = 0.07 % ; 0.74 g/l

9.2. Other information

Substance Groups relevant properties N.A.

Miscibility: N.A.

Conductivity: N.A.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Data not available.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological Information of the Preparation

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified
	Based on available data, the classification criteria are not met
c) serious eye damage/irritation	The product is classified: Eye Irrit. 2(H319)
d) respiratory or skin sensitisation	Not classified
	Based on available data, the classification criteria are not met

e) germ cell mutagenicity	Not classified
f) carcinogenicity	Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified
h) STOT-single exposure	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified
j) aspiration hazard	Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

ethanol; ethyl alcohol	a) acute toxicity	LD50 Oral Rat = 10470 mg/kg LC50 Inhalation Vapour Rat = 117 mg/l 4h LD50 Skin Rabbit = 17100 mg/kg
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative
	c) serious eye damage/irritation	Eye Irritant Rabbit No
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative
	f) carcinogenicity	Genotoxicity Negative
	g) reproductive toxicity	No Observed Adverse Effect Level Oral = 20700 mg/kg
		Mouse oral route
propan-2-ol; isopropyl alcohol; isopropanol	a) acute toxicity	LD50 Oral Rat = 5840 mg/kg LC50 Inhalation Vapour Rat > 10000 Ppm 6h LD50 Skin Rabbit = 16.4 ml/Kg 24h
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative 4h
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative
	f) carcinogenicity	Genotoxicity Negative
		Carcinogenicity = 5000 Ppm
		Mouse intraperitoneal route
		NOEC for mouse
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	a) acute toxicity	LD50 Oral Rat = 69 mg/kg LD50 Skin Rabbit = 141 mg/kg LC50 Inhalation Rat = 0.33 mg/l 4h
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive
	c) serious eye damage/irritation	Eye Corrosive Rabbit Positive
	d) respiratory or skin sensitisation	Skin Sensitization Positive
	f) carcinogenicity	Genotoxicity Negative
		Carcinogenicity Skin Negative
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 22.7 mg/kg

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
ethanol; ethyl alcohol	CAS: 64-17-5 - EINECS: 200-578-6 - INDEX: 603-002-00-5	a) Aquatic acute toxicity : LC50 Fish <i>S. gairdneri</i> > 11.2 g/L 96h b) Aquatic chronic toxicity : NOEC Fish <i>Oryzias latipes</i> = 250 mg/L OECD212 a) Aquatic acute toxicity : LC50 Daphnia <i>Daphnia magna</i> = 5012 mg/L 48h a) Aquatic acute toxicity : NOEC Daphnia <i>Ceriodaphnia dubia</i> = 9.6 mg/L - 10days a) Aquatic acute toxicity : EC50 Algae <i>Chlorella vulgaris</i> = 275 mg/L 72h a) Aquatic acute toxicity : LC50 <i>Paramaecium caudatum</i> = 5800 mg/L - 16hr d) Terrestrial toxicity : LC50 Worm <i>Eisenia foetida</i> = 0.1 mg/cm ² e) Plant toxicity : EC50 = 633 mg/kg
propan-2-ol; isopropyl alcohol; isopropanol	CAS: 67-63-0 - EINECS: 200-661-7 - INDEX: 603-117-00-0	a) Aquatic acute toxicity : LC50 Fish <i>Pimephales promelas</i> = 9640 mg/L 96h a) Aquatic acute toxicity : EC50 Daphnia <i>Daphnia magna</i> = 10000 mg/L 24h OECD guideline 202 d) Terrestrial toxicity : LC50 <i>Drosophila melanogaster</i> = 25.1 g/L 24h e) Plant toxicity : IC50 <i>Lactuca sativa</i> = 2104 mg/kg 72h
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS: 55965-84-9 - INDEX: 613-167-00-5	a) Aquatic acute toxicity : LC50 Fish <i>Oncorhynchus mykiss</i> = 0.19 mg/L 96h EPA OPP 72-1 (Fish Acute Toxicity Test) b) Aquatic chronic toxicity : NOEC Fish <i>Danio rerio</i> = 0.02 mg/L ,OECD Guideline 210 (Fish, Early-Life Stage Toxicity Test) - 35days a) Aquatic acute toxicity : LC50 Daphnia <i>Daphnia magna</i> = 0.16 mg/L 48h EPA OPP 72-2 (Aquatic Invertebrate Acute Toxicity Test) b) Aquatic chronic toxicity : NOEC Daphnia <i>Daphnia magna</i> = 0.1 mg/L EPA OPP 72-4 (Fish Early Life-Stage and Aquatic Invertebrate Life-Cycle Studies) - 21days a) Aquatic acute toxicity : EC50 Algae <i>Skeletonema costatum</i> = 0 mg/L 96h ,OECD Guideline 201 (Alga, Growth Inhibition Test) a) Aquatic acute toxicity : EC50 Sludge activated sludge = 4.5 mg/L 3h ,OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) d) Terrestrial toxicity : LC50 Worm <i>Eisenia fetida</i> = 613 mg/kg ,OECD Guideline 207 (Earthworm, Acute Toxicity Tests) - 14days e) Plant toxicity : NOEC <i>Trifolium pratense</i> , <i>Oryza sativa</i> , <i>Brassica napus</i> = 1000 mg/L OECD Guideline 208 (Terrestrial Plants Test: Seedling Emergence and Seedling Growth Test) - 21days

12.2. Persistence and degradability

Component	Persistence/Degradability:	Test	Duration	Value	Notes:
Sodium sulfate	Readily biodegradable		28d		>60% (OECD tg 301)
ethanol; ethyl alcohol	Readily biodegradable	CO ₂ production		75.000	
propan-2-ol; isopropyl alcohol; isopropanol	Readily biodegradable	Biochemical oxygen demand			
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-	Non-readily biodegradable				

methyl-2H-isothiazol-3-one (3:1)

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

12.3. Bioaccumulative potential

Component	Bioaccumulation	Test	Value	Notes:
ethanol; ethyl alcohol	Bioaccumulative	BCF - Bioconcentration factor	4.500	
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Bioaccumulative	BCF - Bioconcentration factor	54.000	≤ 54

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT or vPvB substances present in concentration >= 0.1%

12.6. Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force. Disposal through discharge into wastewater is not permitted

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number

N/A

14.2. UN proper shipping name

ADR-Shipping Name: N/A

IATA-Shipping Name: N/A

IMDG-Shipping Name: N/A

14.3. Transport hazard class(es)

ADR-Class: N/A

IATA-Class: N/A

IMDG-Class: N/A

14.4. Packing group

ADR-Packing Group: N/A

IATA-Packing group: N/A

IMDG-Packing group: N/A

14.5. Environmental hazards

Toxic ingredients quantity: 0.00

Very toxic ingredients quantity: 0.00

Marine pollutant: No

Environmental Pollutant: No

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR exempt: No

ADR-Label: N/A

ADR - Hazard identification number: N/A

ADR-Special Provisions: N/A

ADR-Transport category (Tunnel restriction code): N/A

Air (IATA):

IATA-Passenger Aircraft: N/A

IATA-Cargo Aircraft: N/A

IATA-Label: N/A

IATA-Subsidiary hazards: N/A

IATA-Erg: N/A

IATA-Special Provisions: N/A

Sea (IMDG):

IMDG-Stowage and handling: N/A
IMDG-Segregation: N/A
IMDG-Subsidiary hazards: N/A
IMDG-Special Provisions: N/A
IMDG-EMS: N/A

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

N.A.

SECTION 15: Regulatory information

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

Workplace exposure limit within the meaning of the Control of Substances Hazardous to Health Regulations 2002 (WEL-EH40)

REACH regulation as changed by the REACH etc. (Amendment etc.) (EU Exit) Regulations (UK REACH)

CLP regulation as changed by the Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations (GB CLP)

GB PIC legislation - (Regulation (EU) No 649/2012 as changed by the Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc) (EU Exit) Regulations

Restrictions related to the product or the substances contained according to Annex XVII of UK REACH:

Restrictions related to the product: 3

Restrictions related to the substances contained: 40

Additional Regulatory Information for Great Britain

No Additional Information

Provisions related to the Control of Major Accident Hazards Regulations 2015 (GB implementation of Seveso III):

None

GB PIC Legislation:

No substances listed

SVHC Substances:

No SVHC substances present in concentration >= 0.1%

UK regulations implementing Dir. 2010/75/EC (VOC directive)

Volatile Organic compounds - VOCs = 0.00 %

Volatile Organic compounds - VOCs = 0.00 g/L

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

Substances for which a Chemical Safety Assessment has been carried out:

Sodium sulfate

ethanol; ethyl alcohol

propan-2-ol; isopropyl alcohol; isopropanol

SECTION 16: Other information

Code	Description	
H225	Highly flammable liquid and vapour.	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H336	May cause drowsiness or dizziness.	
H411	Toxic to aquatic life with long lasting effects.	

Code	Hazard class and hazard category	Description
2.6/2	Flam. Liq. 2	Flammable liquid, Category 2
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2

Classification and procedure used to derive the classification for mixtures according to GB CLP regulation:

Classification according to GB CLP	Classification procedure
Eye Irrit. 2, H319	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Scientific Institute for Research, Hospitalization and Health Care

KAFH: Keep Away From Heat

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LDLo: Leathal Dose Low

N.A.: Not Applicable

N/A: Not Applicable

N/D: Not defined/ Not available

NA: Not available

NIOSH: National Institute for Occupational Safety and Health

NOAEL: No Observed Adverse Effect Level

OSHA: Occupational Safety and Health Administration

PBT: Persistent, Bioaccumulative and Toxic

PGK: Packaging Instruction

PNEC: Predicted No Effect Concentration.

PSG: Passengers

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

vPvB: Very Persistent, Very Bioaccumulative.

Exposure Scenario

Sodium sulfate

Exposure Scenario, 21/03/2023

Substance identity	Sodium sulfate
CAS No.	126-92-1
EINECS No.	204-812-8
Registration number	01-2119971586-23

Table of contents

1. **ES 1** Widespread use by professional workers; Washing and cleaning products (PC35)

1. ES 1

Widespread use by professional workers; Washing and cleaning products (PC35)

1.1 TITLE SECTION

Exposure Scenario name	Professional use of general surface cleaning products
Date - Version	21/03/2023 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Washing and cleaning products (PC35)

Environment Contributing Scenario

CS1	ERC8a
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Worker Contributing Scenario

CS2 Rolling, Brushing	PROC10
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CS3 Hand held spraying	PROC11
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1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario (ERC8a)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a)
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Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use (or from service life)

Amounts used:

Application rate 1000 t(tonnes)/year
Daily amount per site 0.082192 kg/day

Emission days:

365 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

Water - minimum efficiency of: 100 %

Conditions and measures related to sewage treatment plant

STP type:

Municipal Sewage Treatment Plant

STP effluent (m³/day):

2000

Other conditions affecting environmental exposure

Local marine water dilution factor:

100

Local freshwater dilution factor:

10

Receiving surface water flow:

18000 m³/day

Indoor use

1.2. CS2: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Process Categories	Roller application or brushing (PROC10)										
Product (article) characteristics											
Physical form of product:											
Liquid											
Concentration of substance in product:											
Covers percentage substance in the product up to 100 %.											
Amount used, frequency and duration of use/exposure											
Duration:											
Covers use up to > 4 h											
Frequency:											
Covers use up to = 5 days per week											
Technical and organisational conditions and measures											
Technical and organisational measures											
No specific measures identified.											
Conditions and measures related to personal protection, hygiene and health evaluation											
Personal protection											
No specific measures identified.											
Other conditions affecting worker exposure											
Indoor use											
Professional use											
1.2. CS3: Worker Contributing Scenario: Hand held spraying (PROC11)											
Process Categories	Non industrial spraying (PROC11)										
Product (article) characteristics											
Physical form of product:											
Liquid											
Concentration of substance in product:											
Covers percentage substance in the product up to 100 %.											
Amount used, frequency and duration of use/exposure											
Duration:											
Covers use up to 1 h											
Frequency:											
Covers use up to = 5 days per week											
Technical and organisational conditions and measures											
Technical and organisational measures											
No specific measures identified.											
Conditions and measures related to personal protection, hygiene and health evaluation											
Personal protection											
No specific measures identified.											
Other conditions affecting worker exposure											
Indoor use											
Professional use											
1.3 Exposure estimation and reference to its source											
1.3. CS1: Environment Contributing Scenario (ERC8a)											
<table border="1"> <thead> <tr> <th>protection target</th> <th>Exposure level</th> <th>Calculation method</th> <th>Risk Characterization Ratio (RCR)</th> </tr> </thead> <tbody> <tr> <td>freshwater</td> <td>= 0.000229 mg/L</td> <td>EASY TRA v4.1</td> <td>= 0.001689</td> </tr> </tbody> </table>				protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)	freshwater	= 0.000229 mg/L	EASY TRA v4.1	= 0.001689
protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)								
freshwater	= 0.000229 mg/L	EASY TRA v4.1	= 0.001689								

marine water	= 2.4E-05 mg/L	EASY TRA v4.1	= 0.001756
freshwater sediment	= 0.001003 mg/kg dry weight	EASY TRA v4.1	= 0.000669
marine sediment	= 0.000104 mg/kg dry weight	EASY TRA v4.1	= 0.000695
Agricultural soil	= 4.9E-05 mg/kg dry weight	EASY TRA v4.1	= 0.000224
wastewater treatment plant microbes	= 0.000731 mg/L	EASY TRA v4.1	= 0.000541

1.3. CS2: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 241.948 mg/m ³	EASY TRA v4.1	= 0.84894
dermal, systemic, long-term	= 27.429 mg/kg bw/day	EASY TRA v4.1	= 0.006756
combined routes, systemic, long-term	= 61.993 mg/kg bw/day	EASY TRA v4.1	= 0.855696

1.3. CS3: Worker Contributing Scenario: Hand held spraying (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 193.558 mg/m ³	EASY TRA v4.1	= 0.679152
dermal, systemic, long-term	= 107.143 mg/kg bw/day	EASY TRA v4.1	= 0.02639
combined routes, systemic, long-term	= 134.794 mg/kg bw/day	EASY TRA v4.1	= 0.705542

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure Scenario

Ethanol

Exposure Scenario, 29/07/2021

Substance identity	Ethanol
CAS No.	64-17-5
INDEX No.	603-002-00-5
EINECS No.	200-578-6
Registration number	01-2119457610-43

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1. **ES 1** Widespread use by professional workers; Various products (PC9a, PC1)

1. ES 1

Widespread use by professional workers; Various products (PC9a, PC1)

1.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks
Date - Version	29/07/2021 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1)

Environment Contributing Scenario

CS1	ERC8a - ERC8d
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Worker Contributing Scenario

CS2 Rolling, Brushing	PROC10
CS3 Roller, spreader, flow application	PROC11
CS4 Handling and dilution of concentrates	PROC19

1.2 Conditions of use affecting exposure**1.2. CS1: Environment Contributing Scenario (ERC8a, ERC8d)**

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8d)
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Product (article) characteristics**Physical form of product:**

Liquid

Concentration of substance in product:

Covers concentrations up to 80 %

Amount used, frequency and duration of use (or from service life)**Amounts used:**

Annual site tonnage = 10000 t

Release type: Continuous release**Emission days:** 300 days per year**Technical and organisational conditions and measures****Control measures to prevent releases**

Prevent discharge of undissolved substance to or recover from onsite wastewater.	Air - minimum efficiency of: 100 % Soil - minimum efficiency of: 20 % Water - minimum efficiency of: 100 %
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Conditions and measures related to sewage treatment plant**STP type:**Municipal Sewage Treatment Plant
Water - minimum efficiency of: = 90 %**STP effluent (m³/day):** 2000

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

Contain and dispose of waste according to local regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100

Local freshwater dilution factor: 10

Receiving surface water flow: 18000 m³/day

1.2. CS2: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Process Categories	Roller application or brushing (PROC10)
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Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers concentrations up to 80 %

Amount used, frequency and duration of use/exposure

Duration:

Covers use up to > 4 h

Frequency:

Use frequency 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan.

Provide a basic standard of general ventilation (1 to 3 air changes per hour).

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

Personal protection

For further specification, refer to section 8 of the SDS.

Other conditions affecting worker exposure

Indoor use

Professional use

1.2. CS3: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Process Categories	Non industrial spraying (PROC11)
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Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers use up to < 4 h

Frequency:

Use frequency 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan.

Provide a basic standard of general ventilation (1 to 3 air changes per hour).

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

Personal protection

Wear chemically resistant gloves (tested to EN374) in combination with "basic" employee training. For further specification, refer to section 8 of the SDS.

Dermal - minimum efficiency of: = 80 %

Other conditions affecting worker exposure

Indoor use

Professional use

1.2. CS4: Worker Contributing Scenario: Handling and dilution of concentrates (PROC19)

Process Categories	Manual activities involving hand contact (PROC19)
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Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers use up to > 4 h

Frequency:

Use frequency 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Provide a basic standard of general ventilation (1 to 3 air changes per hour).

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

Personal protection

For further specification, refer to section 8 of the SDS.

Other conditions affecting worker exposure

Indoor use

Professional use

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario (ERC8a, ERC8d)

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	= 0.045 mg/L	EUSES v2.1	= 0.0469
freshwater sediment	= 0.045 mg/kg dry weight	EUSES v2.1	= 0.0469
marine water	= 0.0044 mg/L	EUSES v2.1	= 0.00557
marine sediment	= 0.0044 mg/kg dry weight	EUSES v2.1	= 0.00557
soil	= 0.0003 mg/kg dry weight	EUSES v2.1	= 0.00476
wastewater treatment plant microbes	= 0.34 mg/L	EUSES v2.1	= 0.000586

1.3. CS2: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)

inhalative, systemic, long-term	= 198.08 mg/m ³	ECETOC TRA worker v2.0	= 0.202
dermal, systemic, long-term	= 27.42 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.177

1.3. CS3: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 345.75 mg/m ³	ECETOC TRA worker v2.0	= 0.364
dermal, systemic, long-term	= 21.42 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.138

1.3. CS4: Worker Contributing Scenario: Handling and dilution of concentrates (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 115.25 mg/m ³	ECETOC TRA worker v2.0	= 0.1213
dermal, systemic, long-term	= 84.86 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.547

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure Scenario

Propan-2-ol

Exposure Scenario, 29/07/2021

Substance identity	
	Propan-2-ol
CAS No.	67-63-0
INDEX No.	603-117-00-0
EINECS No.	200-661-7
Registration number	01-2119457558-25

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1. **ES 1** Widespread use by professional workers; Various products (PC9a, PC1)

1. ES 1

Widespread use by professional workers; Various products (PC9a, PC1)

1.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks
Date - Version	29/07/2021 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1)

Environment Contributing Scenario

CS1	ERC8a - ERC8d
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Worker Contributing Scenario

CS2 Material transfers	PROC8a
CS3 Rolling, Brushing	PROC10
CS4 Roller, spreader, flow application	PROC11
CS5 Handling and dilution of concentrates	PROC19

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario (ERC8a, ERC8d)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8d)
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Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers concentrations up to 35 %

1.2. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)
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Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

< 100000 Pa

Concentration of substance in product:

Covers concentrations up to 35 %

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

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

Personal protection

For further specification, refer to section 8 of the SDS.

Other conditions affecting worker exposure

Covers indoor and outdoor use

Professional use

Temperature: Assumes use at not more than 20 °C above ambient temperature.

1.2. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Process Categories	Roller application or brushing (PROC10)
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Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

< 100000 Pa

Concentration of substance in product:

Covers concentrations up to 35 %

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

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

Personal protection

For further specification, refer to section 8 of the SDS.

Other conditions affecting worker exposure

Covers indoor and outdoor use

Professional use

Temperature: Assumes use at not more than 20 °C above ambient temperature.

1.2. CS4: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Process Categories	Non industrial spraying (PROC11)
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Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

< 100000 Pa

Concentration of substance in product:

Covers concentrations up to 35 %

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Carry out in a vented booth or extracted enclosure.

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

Personal protection

For further specification, refer to section 8 of the SDS.

Other conditions affecting worker exposure

Covers indoor and outdoor use

Professional use

Temperature: Assumes use at not more than 20 °C above ambient temperature.

1.2. CS5: Worker Contributing Scenario: Handling and dilution of concentrates (PROC19)

Process Categories	Manual activities involving hand contact (PROC19)
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Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

< 100000 Pa

Concentration of substance in product:

Covers concentrations up to 35 %

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

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

Personal protection

For further specification, refer to section 8 of the SDS.

Other conditions affecting worker exposure

Covers indoor and outdoor use

Professional use

Temperature: Assumes use at not more than 20 °C above ambient temperature.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario (ERC8a, ERC8d)

Additional information on exposure estimation:

As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.

1.3. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative	= 100 ppm	ECETOC TRA worker v2.0	= 0.5
dermal	= 13.71 mg/kg bw/day	ECETOC TRA worker v2.0	= 0

1.3. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative	= 100 ppm	ECETOC TRA worker v2.0	= 0.5
dermal	= 27.43 mg/kg bw/day	ECETOC TRA worker v2.0	= 0

1.3. CS4: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)

inhalative	= 150 ppm	ECETOC TRA worker v2.0	= 0.7
dermal	= 107.14 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.1

1.3. CS5: Worker Contributing Scenario: Handling and dilution of concentrates (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative	= 150 ppm	ECETOC TRA worker v2.0	= 0.5
dermal	= 141.43 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.2

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.