

## Safety Data Sheet

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

### FUGA-SOAP

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: FUGA-SOAP

Trade code: S100B0161

### 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.

Skin Sens. 1B May cause an allergic skin reaction.

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

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

#### Precautionary statements

P102 Keep out of reach of children.

P264 Wash ... Thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

P302+P352 IF ON SKIN: Wash with plenty of water/...

P305+P351+P338 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

benzyl alcohol

Detergents (Amendment) (EU Exit) Regulations

Product contents:

anionic surfactants < 5%

Allergens:

Benzyl Alcohol

Citral

Preservatives:

2-bromo-2-nitropropane-1,3-diol

Methylchloroisothiazolinone and methylisothiazolinone

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: FUGA-SOAP

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

Qty	Name	Ident. Numb.	Classification	Registration Number
≥10-<20 %	1-methoxy-2-propanol; monopropylene glycol methyl ether	CAS:107-98-2 EC:203-539-1 Index:603-064-00-3	Flam. Liq. 3, H226; STOT SE 3, H336	
≥10-<20 %	benzyl alcohol	CAS:100-51-6 EC:202-859-9 Index:603-057-00-5	Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319	
≥1-<3 %	Sodium sulfate	CAS:126-92-1 EC:204-812-8	Skin Irrit. 2, H315; Eye Dam. 1, H318	
≥0.1-<0.15 %	sodium hydroxide; caustic soda	CAS:1310-73-2 EC:215-185-5 Index:011-002-00-6	Skin Corr. 1A, H314	
<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	

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

- Immediately take off all contaminated clothing.
- Remove contaminated clothing immediatley 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).

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### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

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.

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### **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

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### **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

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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
1-methoxy-2-propanol; monopropylene glycol methyl ether CAS: 107-98-2	ACGIH		Long Term: 50 ppm (8h); Short Term: 100 ppm A4 - Eye and URT irr
	WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 375 mg/m <sup>3</sup> - 100 ppm; Short Term: 560 mg/m <sup>3</sup> - 150 ppm Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
sodium hydroxide; caustic soda CAS: 1310-73-2	ACGIH		Short Term: Ceiling - 2 mg/m <sup>3</sup> URT, eye, and skin irr
	WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Short Term: 2 mg/m <sup>3</sup> Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
citral CAS: 5392-40-5	ACGIH		Long Term: 5 ppm (8h) IFV, Skin, DSEN, A4 - Body weight eff, URT irr, eye dam

#### Biological limit values

1-methoxy-2-propanol; monopropylene glycol methyl ether CAS: 107-98-2	Biological Indicator: 1-Methoxypropanol-2; Sampling Period: End of turn Value: 20 mg/L; Medium: Urine
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#### Predicted No Effect Concentration (PNEC) values

1-methoxy-2-propanol; monopropylene glycol methyl ether CAS: 107-98-2	Exposure Route: Fresh Water; PNEC Limit: 10 mg/l  Exposure Route: Intermittent releases (fresh water); PNEC Limit: 100 mg/l Exposure Route: Marine water; PNEC Limit: 1 mg/l Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 100 mg/l Exposure Route: Freshwater sediments; PNEC Limit: 52.3 mg/kg Exposure Route: Marine water sediments; PNEC Limit: 5.2 mg/kg Exposure Route: Soil; PNEC Limit: 4.59 mg/kg
benzyl alcohol CAS: 100-51-6	Exposure Route: Fresh Water; PNEC Limit: 1 mg/l  Exposure Route: Marine water; PNEC Limit: 0.1 mg/l Exposure Route: Freshwater sediments; PNEC Limit: 5.27 mg/kg Exposure Route: Marine water sediments; PNEC Limit: 0.527 mg/kg Exposure Route: Intermittent releases (fresh water); PNEC Limit: 2.3 mg/l Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 39 mg/l Exposure Route: Soil; PNEC Limit: 0.456 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: Fresh Water; PNEC Limit: 3.39 µg/l

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

1-methoxy-2-propanol;  
monopropylene glycol  
methyl ether  
CAS: 107-98-2

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 369 mg/m<sup>3</sup>; Consumer: 43.9 mg/m<sup>3</sup>

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects  
Worker Professional: 553.5 mg/m<sup>3</sup>

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects  
Worker Professional: 553.5 mg/m<sup>3</sup>

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 183 mg/kg; Consumer: 78 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects  
Consumer: 33 mg/kg

benzyl alcohol  
CAS: 100-51-6

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 22 mg/m<sup>3</sup>; Consumer: 8.1 mg/m<sup>3</sup>

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects  
Worker Professional: 450 mg/m<sup>3</sup>; Consumer: 40.5 mg/m<sup>3</sup>

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 9.5 mg/kg; Consumer: 5.7 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects  
Worker Professional: 47 mg/kg; Consumer: 28.5 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects  
Consumer: 5 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects  
Consumer: 25 mg/kg

sodium hydroxide; caustic  
soda  
CAS: 1310-73-2

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects  
Worker Professional: 1 mg/m<sup>3</sup>; Consumer: 1 mg/m<sup>3</sup>

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: Long Term, local effects  
Worker Professional: 20 µg/m<sup>3</sup>; Consumer: 20 µg/m<sup>3</sup>

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects  
Worker Professional: 40 µg/m<sup>3</sup>; Consumer: 20 µg/m<sup>3</sup>

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.(EN166)

Protection for skin:

Chemical protection clothing. Safety shoes.

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.

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical State: Liquid

Appearance and colour: Liquid Colourless

Odour: Like: Alcohol

Odour threshold: N.A.

pH: Not Relevant

Melting point / freezing point: N.A.

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

Flash point: 100 °C (212 °F)

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: N.A.

Solubility in water: Soluble

Solubility in oil: N.A.

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

Auto-ignition temperature: 435.00 °C

Decomposition temperature: N.A.

Viscosity: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Solid/gas flammability: N.A.

Volatile Organic compounds - VOCs = 33.49 % ; 334.90 g/l

### 9.2. Other information

Substance Groups relevant properties N.A.

Miscibility: N.A.

Conductivity: N.A.

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## 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.

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## 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	The product is classified: Skin Sens. 1B(H317)
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

#### Toxicological information on main components of the mixture:

1-methoxy-2-propanol; monopropylene glycol methyl ether	a) acute toxicity	LD50 Oral Rat = 4016 mg/kg	
		LC50 Inhalation Vapour Rat Negative 6h	No mortalities observed
		LD50 Skin Rat > 2000 mg/kg	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit No	
	d) respiratory or skin sensitisation	Skin Sensitization Guinea pig Negative	
	f) carcinogenicity	Genotoxicity Carcinogenicity Negative	Mouse intraperitoneal route
benzyl alcohol	g) reproductive toxicity	No Observed Adverse Effect Level Inhalation Rat = 300	ppm
	a) acute toxicity	LD50 Oral Rat = 1620 mg/kg LC50 Inhalation of aerosol Rat > 4178 mg/m <sup>3</sup> 4h LD50 Skin Rabbit > 2000 mg/kg 24h LC50 Inhalation Mist Rat = 4.18 mg/l 4h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes 24h	
	d) respiratory or skin sensitisation	Skin Sensitization Negative	Mouse
	f) carcinogenicity	Genotoxicity Negative Carcinogenicity Oral Rat Negative	Mouse
	g) reproductive toxicity	No Observed Adverse Effect Level Oral = 200 mg/kg	Mouse
sodium hydroxide; caustic soda	a) acute toxicity	LD50 Oral Rabbit = 325 mg/kg	
	b) skin corrosion/irritation	Skin Irritant Human Positive	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes	
	d) respiratory or skin sensitisation	Skin Sensitization Negative	
	f) carcinogenicity	Carcinogenicity Negative	

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
1-methoxy-2-propanol; monopropylene glycol methyl ether	CAS: 107-98-2 - EINECS: 203- 539-1 - INDEX: 603-064-00-3	a) Aquatic acute toxicity : LC50 Fish <i>Leuciscus idus</i> = 6812 mg/L OECD guideline 203
		a) Aquatic acute toxicity : LC50 <i>Daphnia</i> = 23300 mg/L 48h OECD guideline 202
		a) Aquatic acute toxicity : EC50 Algae = 1000 mg/L OECD guideline 201 - 7days
		a) Aquatic acute toxicity : NOEC Sludge = 1000 mg/L OECD guideline 201
benzyl alcohol	CAS: 100-51-6 - EINECS: 202- 859-9 - INDEX: 603-057-00-5	a) Aquatic acute toxicity : LC50 Fish <i>Oryzias latipes</i> = 460 mg/L 96h OECD SIDS (2001)
		b) Aquatic chronic toxicity : NOEC Fish = 48.897 mg/L ECOSAR QSAR
		a) Aquatic acute toxicity : LC50 <i>Daphnia magna</i> = 230 mg/L 48h OECD SIDS (2001)
		b) Aquatic chronic toxicity : NOEC <i>Daphnia magna</i> = 51 mg/L OECD Guideline 211
		a) Aquatic acute toxicity : EC50 Algae <i>Pseudokirchnerella subcapitata</i> = 770 mg/L 72h OECD SIDS on Benzoates (2001)
		c) Bacteria toxicity : EC50 <i>Nitrosomonas</i> = 390 mg/L
sodium hydroxide; caustic soda	CAS: 1310-73-2 - EINECS: 215- 185-5 - INDEX: 011-002-00-6	a) Aquatic acute toxicity : LC50 Fish = 189 mg/L 48h
		a) Aquatic acute toxicity : EC50 <i>Daphnia Ceriodaphnia dubia</i> = 40.4 mg/L 48h
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 Daphnia magna = 0.16 mg/L 48h EPA OPP 72-2 (Aquatic Invertebrate Acute Toxicity Test)

b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna = 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 Skeletonema costatum = 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 Eisenia fetida = 613 mg/kg „OECD Guideline 207 (Earthworm, Acute Toxicity Tests) - 14days

e) Plant toxicity : NOEC Trifolium pratense, Oryza sativa, Brassica napus = 1000 mg/L OECD Guideline 208 (Terrestrial Plants Test: Seedling Emergence and Seedling Growth Test) - 21days

## 12.2. Persistence and degradability

Component	Persitence/Degradability:	Test	Duration	Value	Notes:
1-methoxy-2-propanol; monopropylene glycol methyl ether	Readily biodegradable			69.000	28days
benzyl alcohol	Readily biodegradable	Dissolved organic carbon		96.000	%; OECD Guideline 3
Sodium sulfate	Readily biodegradable		28d		>60% (OECD tg 301
reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2- methyl-2H-isothiazol-3-one (3:1)	Non-readily biodegradable				

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:
benzyl alcohol	Bioaccumulative	BCF - Bioconcentration factor	1.000	L/kg ww
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.

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### 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: 30, 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  $\geq 0.1\%$

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

Volatile Organic compounds - VOCs = 14.00 %  
Volatile Organic compounds - VOCs = 140.00 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:**

benzyl alcohol

Sodium sulfate  
sodium hydroxide; caustic soda

## SECTION 16: Other information

Code	Description
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.

Code	Hazard class and hazard category	Description
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/1A	Skin Corr. 1A	Skin corrosion, Category 1A
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
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3

### 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
Skin Sens. 1B, H317	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

### Benzyl alcohol

## Exposure Scenario, 30/06/2021

Substance identity	
	Benzyl alcohol
CAS No.	100-51-6
INDEX No.	603-057-00-5
EINECS No.	202-859-9
Registration number	01-2119492630-38

## Table of contents

1. **ES 1** Widespread use by professional workers; Various products (PC9b, PC9a, PC1, PC15); Building and construction work (SU19)

1. ES 1		Widespread use by professional workers; Various products (PC9b, PC9a, PC1, PC15); Building and construction work (SU19)	
<b>1.1 TITLE SECTION</b>			
Exposure Scenario name	Professional application of coatings and inks - Use in rigid foams, coatings, adhesives and sealants		
Date - Version	30/06/2021 - 1.0		
Life Cycle Stage	Widespread use by professional workers		
Main user group	Professional uses		
Sector(s) of use	Professional uses (SU22) - Building and construction work (SU19)		
Product Categories	Fillers, putties, plasters, modelling clay (PC9b) - Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1) - Non-metal surface treatment products (PC15)		
<b>Environment Contributing Scenario</b>			
CS1	ERC8a - ERC8d		
<b>Worker Contributing Scenario</b>			
CS2	PROC8a - PROC10		
<b>1.2 Conditions of use affecting exposure</b>			
<b>1.2. CS1: Environment Contributing Scenario (ERC8a, ERC8d)</b>			
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)		
<i>Product (article) characteristics</i>			
<b>Physical form of product:</b> Liquid, vapour pressure < 10 Pa (Standard Temperature and Pressure)			
<b>Vapour pressure:</b> = 7 Pa			
<i>Amount used, frequency and duration of use (or from service life)</i>			
<b>Amounts used:</b> Annual site tonnage = 1000 t(tonnes)/year			
<b>Release type:</b> Continuous release			
<b>Emission days:</b> 365 days per year			
<i>Conditions and measures related to sewage treatment plant</i>			
<b>STP type:</b> Municipal Sewage Treatment Plant Water - minimum efficiency of: = 87.36 %			
<b>STP effluent (m³/day):</b> 2000			
<i>Conditions and measures related to treatment of waste (including article waste)</i>			
<b>Waste treatment</b> Product residual disposal complies with applicable regulations.			
<b>1.2. CS2: Worker Contributing Scenario (PROC8a, PROC10)</b>			
Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Roller application or brushing (PROC8a, PROC10)		
<i>Product (article) characteristics</i>			
<b>Physical form of product:</b> Liquid			

**Vapour pressure:**

&lt; 7 Pa

**Amount used, frequency and duration of use/exposure****Duration:**

Covers use up to = 8 h/day

**Technical and organisational conditions and measures****Technical and organisational measures**

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.  
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 suitable gloves tested to EN374.	Dermal - minimum efficiency of: = 90 %
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**Other conditions affecting worker exposure**

Covers indoor and outdoor use

Professional use

**Temperature:** Assumes use at not more than 20 °C above ambient temperature.**Body parts exposed:**

Assumes that potential dermal contact is limited to hands.

**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	N/A	EUSES v2.1	< 0.01
freshwater sediment	N/A	EUSES v2.1	< 0.01
marine water	N/A	EUSES v2.1	< 0.01
marine sediment	N/A	EUSES v2.1	< 0.01
soil	N/A	EUSES v2.1	= 0.019
Man via environment - Inhalation	N/A	EUSES v2.1	< 0.01
Man via environment - Oral	N/A	EUSES v2.1	< 0.01

**1.3. CS2: Worker Contributing Scenario (PROC8a, PROC10)**

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
combined routes, systemic, long-term	N/A	ECETOC TRA worker v3	0.977

**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

### 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)	
<b>1.1 TITLE SECTION</b>			
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)		
<b>Environment Contributing Scenario</b>			
CS1	ERC8a		
<b>Worker Contributing Scenario</b>			
CS2 Rolling, Brushing	PROC10		
CS3 Hand held spraying	PROC11		
<b>1.2 Conditions of use affecting exposure</b>			
<b>1.2. CS1: Environment Contributing Scenario (ERC8a)</b>			
Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a)		
<i>Product (article) characteristics</i>			
<b>Physical form of product:</b> Liquid			
<b>Concentration of substance in product:</b> Covers percentage substance in the product up to 100 %.			
<i>Amount used, frequency and duration of use (or from service life)</i>			
<b>Amounts used:</b> Application rate 1000 t(onnes)/year Daily amount per site 0.082192 kg/day			
<b>Emission days:</b> 365 days per year			
<i>Technical and organisational conditions and measures</i>			
<b>Control measures to prevent releases</b>			
		Water - minimum efficiency of: 100 %	
<i>Conditions and measures related to sewage treatment plant</i>			
<b>STP type:</b> Municipal Sewage Treatment Plant			
<b>STP effluent (m³/day):</b> 2000			
<i>Other conditions affecting environmental exposure</i>			
<b>Local marine water dilution factor:</b> 100 <b>Local freshwater dilution factor:</b> 10 <b>Receiving surface water flow:</b> 18000 m³/day Indoor use			
<b>1.2. CS2: Worker Contributing Scenario: Rolling, Brushing (PROC10)</b>			

<b>Process Categories</b>	Roller application or brushing (PROC10)		
<i>Product (article) characteristics</i>			
<b>Physical form of product:</b> Liquid			
<b>Concentration of substance in product:</b> Covers percentage substance in the product up to 100 %.			
<i>Amount used, frequency and duration of use/exposure</i>			
<b>Duration:</b> Covers use up to > 4 h			
<b>Frequency:</b> Covers use up to = 5 days per week			
<i>Technical and organisational conditions and measures</i>			
<b>Technical and organisational measures</b> No specific measures identified.			
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>			
<b>Personal protection</b> No specific measures identified.			
<i>Other conditions affecting worker exposure</i>			
Indoor use Professional use			
<b>1.2. CS3: Worker Contributing Scenario: Hand held spraying (PROC11)</b>			
<b>Process Categories</b>	Non industrial spraying (PROC11)		
<i>Product (article) characteristics</i>			
<b>Physical form of product:</b> Liquid			
<b>Concentration of substance in product:</b> Covers percentage substance in the product up to 100 %.			
<i>Amount used, frequency and duration of use/exposure</i>			
<b>Duration:</b> Covers use up to 1 h			
<b>Frequency:</b> Covers use up to = 5 days per week			
<i>Technical and organisational conditions and measures</i>			
<b>Technical and organisational measures</b> No specific measures identified.			
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>			
<b>Personal protection</b> No specific measures identified.			
<i>Other conditions affecting worker exposure</i>			
Indoor use Professional use			
<b>1.3 Exposure estimation and reference to its source</b>			
<b>1.3. CS1: Environment Contributing Scenario (ERC8a)</b>			
<b>protection target</b>	<b>Exposure level</b>	<b>Calculation method</b>	<b>Risk Characterization Ratio (RCR)</b>
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 <sup>3</sup>	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 <sup>3</sup>	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

### Sodium hydroxide; caustic soda

## Exposure Scenario, 31/08/2021

Substance identity	
	Sodium hydroxide; caustic soda
CAS No.	1310-73-2
INDEX No.	011-002-00-6
EINECS No.	215-185-5
Registration number	01-2119457892-27

## Table of contents

1. **ES 1** Widespread use by professional workers; Various products (PC9a, PC9b)

1. ES 1		Widespread use by professional workers; Various products (PC9a, PC9b)	
<b>1.1 TITLE SECTION</b>			
Exposure Scenario name	Professional application of coatings and inks - Use in rigid foams, coatings, adhesives and sealants		
Date - Version	31/08/2021 - 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) - Fillers, putties, plasters, modelling clay (PC9b)		
<b>Environment Contributing Scenario</b>			
CS1	ERC8a - ERC8d		
<b>Worker Contributing Scenario</b>			
CS2 Material transfers - Rolling, Brushing - Handling and dilution of concentrates	PROC8a - PROC10 - PROC19		
CS3 Roller, spreader, flow application	PROC11		
<b>1.2 Conditions of use affecting exposure</b>			
<b>1.2. CS1: Environment Contributing Scenario (ERC8a, ERC8d)</b>			
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)		
<i>Product (article) characteristics</i>			
Physical form of product: Liquid			
Concentration of substance in product: Covers concentrations up to 0.3 %			
<i>Amount used, frequency and duration of use (or from service life)</i>			
Emission days: 365 days per year			
<i>Technical and organisational conditions and measures</i>			
Control measures to prevent releases Prevent discharge of undissolved substance to or recover from onsite wastewater.			
<i>Conditions and measures related to sewage treatment plant</i>			
STP type: Municipal Sewage Treatment Plant			
<b>1.2. CS2: Worker Contributing Scenario: Material transfers - Rolling, Brushing - Handling and dilution of concentrates (PROC8a, PROC10, PROC19)</b>			
Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Roller application or brushing - Manual activities involving hand contact (PROC8a, PROC10, PROC19)		
<i>Product (article) characteristics</i>			
Physical form of product: Liquid			
Concentration of substance in product: 0.3 %			
<i>Amount used, frequency and duration of use/exposure</i>			

**Duration:**

Covers use up to 8 h/day

**Frequency:**

Use frequency = 200 days per year

***Technical and organisational conditions and measures*****Technical and organisational measures**

Ensure operatives are trained to minimise exposures.

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

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

Wear suitable gloves tested to EN374.

Use suitable eye protection.

Wear suitable coveralls to prevent exposure to the skin.

Wear suitable respiratory protection.

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

Non industrial spraying (PROC11)

***Product (article) characteristics*****Physical form of product:**

Liquid

**Concentration of substance in product:**

0.3 %

***Amount used, frequency and duration of use/exposure*****Duration:**

Covers use up to 8 h/day

**Frequency:**

Use frequency = 200 days per year

***Technical and organisational conditions and measures*****Technical and organisational measures**

Ensure operatives are trained to minimise exposures.

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Other skin protection measures such as impervious suits and face shields may be required during high dispersion activities which are likely to lead to substantial aerosol release, e.g. spraying.

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

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

Wear suitable gloves tested to EN374.

Use suitable eye protection.

Wear suitable coveralls to prevent exposure to the skin.

Wear suitable respiratory protection.

**1.3 Exposure estimation and reference to its source****1.3. CS2: Worker Contributing Scenario: Material transfers - Rolling, Brushing - Handling and dilution of concentrates (PROC8a, PROC10, PROC19)**

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, local, short-term	= 0.5 mg/m <sup>3</sup>	ECETOC TRA worker v3	N/A

**Additional information on exposure estimation:**

Dermal exposure is considered to be not relevant.

**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, local, short-term	= 0.2 mg/m <sup>3</sup>	ECETOC TRA worker v3	N/A

**Additional information on exposure estimation:**

Dermal exposure is considered to be not relevant.

## 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.