Safety Data Sheet
Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878
SILO-PUR FLEX
Date of first edition: 9/29/2020
Safety Data Sheet dated 9/7/2022
version 7

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

1.1. Product identifier

Mixture identification:

Trade name: SILO-PUR FLEX

Trade code: 23072021-03 -3

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

Recommended use: Liquid organic varnishes for hardwood floors

Uses advised against: Not available

1.3. Details of the supplier of the safety data sheet

Company: KERAKOLL S.p.A.

Via dell'Artigianato, 9

41049 Sassuolo (MODENA) - ITALY

Tel.+39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

1.4. Emergency telephone number

European emergency phone number 112

Kerakoll Italy - +39-0536-816511

Ireland

Poison information centre: 01 809 2166 (Daily 8am-10pm)

In case of emergency call 999 or 112

Malta

In case of emergency call: +356 2395 2000 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Flam. Liq. 2	Highly flammable liquid and vapour.
Eye Irrit. 2	Causes serious eye irritation.
STOT SE 3	May cause drowsiness or dizziness.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Pictograms and Signal Words

Danger

Hazard statements

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233	Keep container tightly closed.
P243	Take action to prevent static discharges.
P260	Do not breathe vapours.
P271	Use only outdoors or in a well-ventilated area.
P370+P378	In case of fire, use a foam fire extinguisher to extinguish.

Special Provisions:

EUH066 Repeated exposure may cause skin dryness or cracking.

Contains

propan-2-ol; isopropyl alcohol; isopropanol

n-butyl acetate

2-methoxy-1-methylethyl acetate

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor 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: SILO-PUR FLEX

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

Qty	Name	Ident. Numb.	Classification	Registration Number
20-24,9 %	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	01-2119457558-25
10-19,9 %	n-butyl acetate	CAS:123-86-4 EC:204-658-1 Index:607-025-00-1	Flam. Liq. 3, H226; STOT SE 3, H336, EUH066	01-2119485493-29
5-9,9 %	2-methoxy-1-methylethyl acetate	CAS:108-65-6 EC:203-603-9	Flam. Liq. 3, H226; STOT SE 3, H336	01-2119475791-29

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 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 opthalmologist 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:

In case of fire, use a foam fire extinguisher to extinguish.

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

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

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, inhaltion of vapours and mists.

Do not use on extensive surface areas in premises where there are occupants.

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.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Avoid accumulating electrostatic charge.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

Safety electric system.

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)

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Notes
ethanol; ethyl alcohol	ACGIH	NNN					1000	A3 - URT irr
propan-2-ol; isopropyl alcohol; isopropanol	NATIONAL	AUSTRALIA		983.000	400.000	1230.000	500.000	
	NATIONAL	AUSTRIA		500.000	200.000	2000.000	800.000	
	NATIONAL	BELGIUM		500.000	200.000	1000.000	400.000	
	NATIONAL	CANADA			200.000		400.000	Ontario
	NATIONAL	CANADA		983.000	400.000	1230.000	500.000	Quebec
	NATIONAL	DENMARK		490.000	200.000	980.000	400.000	
	NATIONAL	FINLAND		500.000	200.000	620.000	250.000	
	NATIONAL	FRANCE				980.000	400.000	
	NATIONAL	GERMANY		500.000	200.000	1000.000	400.000	AGS
	NATIONAL	GERMANY		500.000	200.000	1000.000	400.000	DFG
	NATIONAL	HUNGARY		500.000		2000.000		
	NATIONAL	IRELAND			200.000		400.000	
	NATIONAL	JAPAN			400.000			MHLW
	NATIONAL	JAPAN	C	980.000	400.000			JSOH
	NATIONAL	LATVIA		350.000		600.000		
	NATIONAL	NEW ZEALAND		983.000	400.000	1230.000	500.000	
	NATIONAL	CHINA		350.000		700.000		
	NATIONAL	POLAND		900.000		1200.000		
	NATIONAL	ROMANIA		200.000	81.000	500.000	203.000	
	NATIONAL	SINGAPORE		983.000	400.000	1230.000	500.000	
	NATIONAL	KOREA, REPUBLIC OF		480.000	200.000	980.000	400.000	
	NATIONAL	SPAIN		500.000	200.000	1000.000	400.000	
	NATIONAL	SWEDEN		350.000	150.000	600.000	250.000	
	NATIONAL	SWITZERLAND		500.000	200.000	1000.000	400.000	
	NATIONAL	UNITED STATES OF AMERICA		980.000	400.000	1225.000	500.000	NIOSH
	NATIONAL	UNITED STATES OF AMERICA		980.000	400.000			OSHA
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND		999.000	400.000	1250.000	500.000	
	NATIONAL	ITALY		492.000	200.000	983.000	400.000	
	NATIONAL	ARGENTINA			400.000		500.000	
	NATIONAL	BULGARIA		980.000		1225.000		
	NATIONAL	CZECHIA		500.000		1000.000		
	NATIONAL	CHILE		858.000	358.000	1230.000	500.000	
	NATIONAL	CROATIA		999.000	400.000	1250.000	500.000	
	NATIONAL	ESTONIA		350.000	150.000	600.000	250.000	
	NATIONAL	GREECE		980.000	400.000	1225.000	500.000	
	NATIONAL	INDONESIA		983.000	400.000	1230.000	500.000	
	NATIONAL	ICELAND		490.000	200.000			
	NATIONAL	LITHUANIA		350.000	150.000	600.000	250.000	

	NATIONAL	MALAYSIA	49.000	10.000			
	NATIONAL	MEXICO		200.000		400.000	
	NATIONAL	NORWAY	245.000	100.000			
	NATIONAL	NETHERLANDS	650.000	250.000			
	NATIONAL	PORTUGAL		200.000		400.000	
	NATIONAL	RUSSIAN FEDERATION	10.000		50.000		
	NATIONAL	SLOVAKIA	500.000	200.000	1000.000	400.000	
	NATIONAL	SLOVENIA	500.000	200.000	1000.000	400.000	
	ACGIH	NNN		200		400	A4, BEI - Eye and URT irr, CNS impair
n-butyl acetate	NATIONAL	AUSTRALIA	713.000	150.000	950.000	200.000	
	NATIONAL	AUSTRIA	480.000	100.000	480.000	100.000	
	NATIONAL	BELGIUM	238.000	50.000	712.000	150.000	
	NATIONAL	CANADA		150.000		200.000	Ontario
	NATIONAL	CANADA	713.000	150.000	950.000	200.000	Quebec
	NATIONAL	DENMARK	710.000	150.000	1420.000	300.000	
	NATIONAL	FINLAND	720.000	150.000	960.000	200.000	
	NATIONAL	FRANCE	710.000	150.000	940.000	200.000	
	NATIONAL	GERMANY	300.000	62.000	600.000	124.000	ASG
	NATIONAL	GERMANY	480.000	100.000	960.000	200.000	DFG
	NATIONAL	HUNGARY	950.000		950.000		
	NATIONAL	IRELAND	710.000	150.000	950.000	200.000	
	NATIONAL	ISRAEL	238.000	50.000	713.000	150.000	
	NATIONAL	JAPAN		150.000			MHLW
	NATIONAL	JAPAN	475.000	100.000			JSOH
	NATIONAL	LATVIA	200.000				
	NATIONAL	NEW ZEALAND	713.000	150.000	950.000	200.000	
	NATIONAL	CHINA	200.000		300.000		
	NATIONAL	POLAND	200.000		950.000		
	NATIONAL	ROMANIA	715.000	150.000	950.000	200.000	
	NATIONAL	SINGAPORE	713.000	150.000			
	NATIONAL	KOREA, REPUBLIC OF	710.000	150.000	950.000	200.000	
	NATIONAL	SPAIN	724.000	150.000	965.000	200.000	
	NATIONAL	SWEDEN	500.000	100.000	700.000	150.000	
	NATIONAL	SWITZERLAND	480.000	100.000	960.000	200.000	
	NATIONAL	UNITED STATES OF AMERICA	710.000	150.000	950.000	200.000	NIOSH
	NATIONAL	UNITED STATES OF AMERICA	710.000	150.000			OSHA
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	724.000	150.000	966.000	200.000	
	NATIONAL	ITALY	241.000	50.000	723.000	150.000	
	NATIONAL	ARGENTINA		150.000		200.000	

	NATIONAL	BULGARIA	710.000		950.000		
	NATIONAL	CZECHIA	950.000		1200.000		
	NATIONAL	CHILE	624.000	131.000	950.000	200.000	
	NATIONAL	CROATIA	724.000	150.000	966.000	200.000	
	NATIONAL	GREECE	710.000	150.000	950.000	200.000	
	NATIONAL	INDONESIA		50.000		150.000	
	NATIONAL	ICELAND	700.000	150.000			
	NATIONAL	MALAYSIA		150.000		200.000	
	NATIONAL	NORWAY	355.000	75.000			
	NATIONAL	NETHERLANDS	480.000	100.000	480.000	100.000	
	NATIONAL	PORTUGAL		150.000		200.000	
	NATIONAL	RUSSIAN FEDERATION		50.000		200.000	
	NATIONAL	SLOVAKIA	500.000	100.000	700.000	150.000	
	NATIONAL	SLOVENIA	300.000	62.000	600.000	124.000	
	NATIONAL	SOUTH AFRICA	710.000	150.000	950.000	200.000	
	NATIONAL	TAIWAN, PROVINCE OF CHINA	712.000	50.000			
	EU		241.000	50.000	723.000	150.000	
	ACGIH	NNN		50		150	Eye and URT irr
2-methoxy-1-methylethyl acetate	NATIONAL	AUSTRALIA	274.000	50.000	548.000	100.000	
	NATIONAL	AUSTRIA	275.000	50.000	550.000	100.000	
	NATIONAL	BELGIUM	275.000	50.000	550.000	100.000	
	NATIONAL	CANADA	270.000	50.000			Ontario
	NATIONAL	DENMARK	275.000	50.000	550.000	100.000	
	NATIONAL	FINLAND	270.000	50.000	550.000	100.000	
	NATIONAL	FRANCE	275.000	50.000	550.000	100.000	
	NATIONAL	GERMANY	270.000	50.000	270.000	100.000	AGS
	NATIONAL	GERMANY	270.000	50.000	270.000	100.000	DFG
	NATIONAL	HUNGARY	270.000		550.000		
	NATIONAL	IRELAND	275.000	50.000	550.000	100.000	
	NATIONAL	ISRAEL	270.000	50.000			
	NATIONAL	ITALY	275.000	50.000	550.000	100.000	
	NATIONAL	LATVIA	275.000	50.000	550.000	100.000	
	NATIONAL	ROMANIA	275.000	50.000	550.000	100.000	
	NATIONAL	SPAIN	275.000	50.000	550.000	100.000	
	NATIONAL	SWEDEN	275.000	50.000	550.000	100.000	
	NATIONAL	SWITZERLAND	275.000	50.000	275.000	50.000	
	NATIONAL	NETHERLANDS	275.000				
	NATIONAL	TURKEY	275.000	50.000	550.000	100.000	
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	274.000	50.000	548.000	100.000	
	NATIONAL	BULGARIA	275.000	50.000	550.000	100.000	
	NATIONAL	CZECHIA	270.000		550.000		

NATIONAL	CROATIA	275.000	50.000	550.000	100.000		
NATIONAL	ESTONIA	275.000	50.000	550.000	100.000		
NATIONAL	ICELAND	275.000	50.000	550.000	100.000		
NATIONAL	LITHUANIA	250.000	50.000	400.000	75.000		
NATIONAL	NORWAY	270.000	5.000				
NATIONAL	POLAND	260.000		520.000			
NATIONAL	PORTUGAL	275.000	50.000	550.000	100.000		
NATIONAL	RUSSIAN FEDERATION				10.000		
NATIONAL	SLOVAKIA	275.000	50.000	550.000	100.000		
NATIONAL	SLOVENIA	275.000	50.000	550.000	100.000		
NATIONAL	UNITED STATES OF AMERICA		50.000				
EU	NNN	275	50	550	100	Skin	

Biological limit values

CAS-No.	Component	Value	UoM	Medium	Biological Indicator	Sampling Period
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	25	mg/L	Urine	Acetone	End of turn
		25	mg/L	Blood	Acetone	End of turn

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency
propan-2-ol; isopropyl alcohol; isopropanol	67-63-0	140.900 mg/l	Freshwater	
		140.900 mg/l	Intermittent releases (freshwater)	
		140.900 mg/l	Marine water	
		2251.000 mg/l	Microorganisms in sewage treatments	
		552.000 mg/kg	Freshwater sediments	
		552.000 mg/kg	Marine water sediments	
		28.000 mg/kg	Soil	
		160.000 mg/kg	Secondary poinsoning	
n-butyl acetate	123-86-4	180.000 µg/l	Freshwater	
		360.000 µg/l	Intermittent releases (freshwater)	
		18.000 µg/l	Marine water	
		35.600 mg/l	Microorganisms in sewage treatments	
		981.000 µg/kg	Freshwater sediments	
		98.100 µg/kg	Marine water sediments	
		90.300 µg/kg	Soil	
2-methoxy-1-methylethyl acetate	108-65-6	635.000 µg/l	Freshwater	
		6.350 mg/l	Intermittent releases (freshwater)	
		63.500 µg/l	Marine water	
		100.000 mg/l	Microorganisms in sewage treatments	
		3.290 mg/kg	Freshwater sediments	
		329.000 µg/kg	Marine water sediments	

				290.000 µg/kg	Soil	

Derived No Effect Level (DNEL) values

Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency
propan-2-ol; isopropyl alcohol; isopropanol	67-63-0			89.000 mg/m³	Human Inhalation	Long Term, systemic effects
				319.000 mg/kg	Human Dermal	Long Term, systemic effects
				26.000 mg/kg	Human Oral	Long Term, systemic effects
n-butyl acetate	123-86-4		48.000 mg/m³	12.000 mg/m³	Human Inhalation	Long Term, systemic effects
			600.000 mg/m³	300.000 mg/m³	Human Inhalation	Short Term, systemic effects
			300.000 mg/m³	35.700 mg/m³	Human Inhalation	Long Term, local effects
			600.000 mg/m³	300.000 mg/m³	Human Inhalation	Short Term, local effects
			7.000 mg/kg	3.400 mg/kg	Human Dermal	Long Term, systemic effects
			11.000 mg/kg	6.000 mg/kg	Human Dermal	Short Term, systemic effects
				2.000 mg/kg	Human Oral	Long Term, systemic effects
				2.000 mg/kg	Human Oral	Short Term, systemic effects
2-methoxy-1-methylethyl acetate	108-65-6		275.000 mg/m³	33.000 mg/m³	Human Inhalation	Long Term, systemic effects
			550.000 mg/m³		Human Inhalation	Short Term, systemic effects
				33.000 mg/m³	Human Inhalation	Long Term, local effects
			796.000 mg/kg	320.000 mg/kg	Human Dermal	Long Term, systemic effects
				36.000 mg/kg	Human Oral	Long Term, systemic effects

8.2. Exposure controls

Eye protection:

Eye glasses with side protection.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Nitrile rubber .

Respiratory protection:

Gas filter type AX .

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A.

Hygienic and Technical measures

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State Liquid

Color: Yellow

Odour: Pungent
Odour threshold: N.A.
pH: N.A.
Kinematic viscosity: N.A.
Melting point / freezing point: N.A.
Initial boiling point and boiling range: N.A.
Flash point: < 23°C
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Vapour pressure: N.A.
Relative density: 0.84 REL
Solubility in water: Immiscible
Solubility in oil: N.A.
Partition coefficient (n-octanol/water): N.A.
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Flammability: The product is classified Flam. Liq. 2 H225
Volatile Organic compounds - VOCs = 91.8 % ; 7.71 g/l
Particle characteristics:
Particle size: N.A.

9.2. Other information

Miscibility: N.A.
Conductivity: N.A.
Evaporation rate: N.A. No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

It may generate dangerous reactions (See subsections below)

10.2. Chemical stability

It may generate dangerous reactions (See subsections below)

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Avoid accumulating electrostatic charge.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

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

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
	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	The product is classified: STOT SE 3(H336)
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:

propan-2-ol; isopropyl alcohol; isopropanol	a) acute toxicity	LD50 Oral Rat = 5840.00 mg/kg	
		LC50 Inhalation Vapour Rat > 10000.00 Ppm 6h	
		LD50 Skin Rabbit = 16.40 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	Mouse intraperitoneal rout
		Carcinogenicity = 5000.00 Ppm	NOEC for mouse
n-butyl acetate	a) acute toxicity	LD50 Oral Rat = 10760.00000 mg/kg	
		LC50 Inhalation of aerosol Rat = 0.74000 mg/l 4h	
		LD50 Skin Rabbit > 16.00000 ml/Kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative	
	c) serious eye damage/irritation	Eye Irritant Rabbit No	
	d) respiratory or skin sensitisation	Skin Sensitization Negative	Mouse
	f) carcinogenicity	Genotoxicity Negative	Mouse oral route
	g) reproductive toxicity	No Observed Adverse Effect Level Inhalation Rat = 750.00000	ppm
2-methoxy-1-methylethyl acetate	a) acute toxicity	LD50 Oral Rat = 6190.00000 mg/kg	
		LD50 Skin Rabbit > 5000.00000 mg/kg 24h	
	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 Guineapig Negative	
	g) reproductive toxicity	No Observed Effect Level Rat = 3.69000 mg/l	Inhalation route

11.2 Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

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
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 Pimephales promelas = 9640.00 mg/L 96h
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 10000.00 mg/L

		24h OECD guideline 202 d) Terrestrial toxicity : LC50 Drosophila melanogaster = 25.10 g/L 24h e) Plant toxicity : IC50 Lactuca sativa = 2104.00 mg/kg 72h
n-butyl acetate	CAS: 123-86-4 - EINECS: 204-658-1 - INDEX: 607-025-00-1	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 18.00000 mg/L 96h similar to OECD 203 a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 44.00000 mg/L 48h similar to OECD 202 b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna = 23.00000 mg/L OECD 211 - 21days a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 397.00000 mg/L 72h OECD 201 a) Aquatic acute toxicity : EC50 Tetrahymena pyriformis = 356.00000 mg/L - 40h
2-methoxy-1-methylethyl acetate	CAS: 108-65-6 - EINECS: 203-603-9	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 130.00000 mg/L 96h OECD guideline 203 b) Aquatic chronic toxicity : NOEC Fish Oryzias latipes = 47.50000 mg/L OECD guideline 204 - 14days a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 408.00000 mg/L 48h OECD guideline 202 b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna > 100.00000 mg/L OECD guideline 211 - 24days a) Aquatic acute toxicity : NOEC Algae Selenastrum capricornutum >= 1000.00000 mg/L OECD guideline 201

12.2. Persistence and degradability

Component	Persitence/Degradability:	Test	Value	Notes
propan-2-ol; isopropyl alcohol; isopropanol	Readily biodegradable	Biochemical oxigen demand		
n-butyl acetate	Readily biodegradable		83.000	%; OECD 301 D
2-methoxy-1-methylethyl acetate	Readily biodegradable	Dissolved organic carbon		OECD GL 301E

12.3. Bioaccumulative potential

Component	Bioaccumulation	Test
n-butyl acetate	Bioaccumulative	BCF - Bioconcentrantion factor

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

12.6 Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7 Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

A waste code according to European waste catalogue (EWC) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):

HP 3: Flammable; HP 4: Irritant — skin irritation and eye damage

SECTION 14: Transport information

14.1. UN number or ID number

1263

14.2. UN proper shipping name

ADR-Shipping Name: PAINT

IATA-Technical name: PAINT

IMDG-Technical name: PAINT

14.3. Transport hazard class(es)

ADR-Class: 3

IATA-Class: 3

IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: II

IATA-Packing group: II

IMDG-Packing group: II

14.5. Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: F-E, S-E

14.6. Special precautions for user

Road and Rail (ADR-RID) :

ADR-Label: 3

ADR - Hazard identification number: 33

ADR-Special Provisions: 163 367 640C 650

ADR-Transport category (Tunnel restriction code): 2 (D/E)

ADR Limited Quantities: 5 L

ADR Excepted Quantities: E2

Air (IATA) :

IATA-Passenger Aircraft: 353

IATA-Cargo Aircraft: 364

IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisioning: A3 A72 A192

Sea (IMDG) :

IMDG-Stowage Code: Category B

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 163 367

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2020/878
Regulation (EC) nr 648/2004 (Detergents).

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3, 40

Restrictions related to the substances contained: 75

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1	Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
Product belongs to category: P5c	5000	50000

Regulation (EU) 649/2012 (PIC regulation):

No Substance Listed

German Water Hazard Class.

Class 3: extremely hazardous.

SVHC Substances:

No data available

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Code	Hazard class and hazard category	Description
2.6/2	Flam. Liq. 2	Flammable liquid, Category 2
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
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 Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
2.6/2	On basis of test data
3.3/2	Calculation method
3.8/3	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
GefStoffVO: Ordinance on Hazardous Substances, Germany.
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.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 4. FIRST AID MEASURES
- 5. FIRE-FIGHTING MEASURES
- 6. ACCIDENTAL RELEASE MEASURES

- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 10. STABILITY AND REACTIVITY
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 13. DISPOSAL CONSIDERATIONS
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION

Exposure Scenario

2-methoxy-1-methylethyl acetate

Exposure Scenario, 08/06/2021

Substance identity	
	2-methoxy-1-methylethyl acetate
CAS No.	108-65-6
INDEX No.	607-195-00-7
EINECS No.	203-603-9
Registration number	01-2119475791-29

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1. ES 1

1.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks by brush or roller
Date - Version	29/04/2021 - 1.0
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Environment Contributing Scenario

CS1	ERC8a - ERC8d

Worker Contributing Scenario

CS2 Large surfaces - Rolling, Brushing	PROC10

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)

Product (article) characteristics

Physical form of product:
Liquid

Concentration of substance in product:
Covers concentrations up to 100 %

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

Amounts used:
Daily amount per site = 5000 kg

Release type: Continuous release

Emission days: 365 days per year

Conditions and measures related to sewage treatment plant

STP type:
Municipal Sewage Treatment Plant
Water - minimum efficiency of: = 87.3 %

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

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:
Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases.

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

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers concentrations up to 100 %

Amount used, frequency and duration of use/exposure

Amounts used:

Daily amount per site = 5000 kg

Duration:

Exposure duration = 8 h/day

Frequency:

Use frequency = 365 days per year

Technical and organisational conditions and measures

Technical and organisational measures

Ensure control measures are regularly inspected and maintained.
Carry out in a vented booth or extracted enclosure.

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

Personal protection

Wear a respirator conforming to EN140.

Other conditions affecting worker exposure

Covers indoor and outdoor 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)

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	= 0.003 mg/L	ECETOC TRA environment v3	= 0.004
freshwater sediment	= 0.014 mg/kg KW	ECETOC TRA environment v3	= 0.004
marine water	= 0.0004 mg/L	ECETOC TRA environment v3	= 0.007
marine sediment	= 0.002 mg/kg KW	ECETOC TRA environment v3	= 0.007
soil	= 0.001 mg/kg KW	ECETOC TRA environment v3	= 0.004

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

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 137.71 mg/m³	ECETOC TRA worker v3	= 0.5
dermal, systemic, long-term	= 13.71 mg/kg bw/day	ECETOC TRA worker v3	0.18

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
N-butyl acetate

Exposure Scenario, 13/07/2021

Substance identity	
	N-butyl acetate
CAS No.	123-86-4
INDEX No.	607-025-00-1
EINECS No.	204-658-1
Registration number	01-2119485493-29

Table of contents

1. ES 1 Widespread use by professional workers; Coatings and paints, thinners, paint removers (PC9a)

1.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks
Date - Version	14/05/2021 - 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)

Environment Contributing Scenario

CS1	ERC8a

Worker Contributing Scenario

CS2 Equipment cleaning and maintenance - Roller, spreader, flow application	PROC11
CS3 Equipment cleaning and maintenance - Rolling, Brushing - Material transfers	PROC8a - PROC10

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)

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 = 4000 t(onnes)/year

Conditions and measures related to sewage treatment plant

STP type:
Municipal Sewage Treatment Plant
Water - minimum efficiency of: = 89.1 %

Other conditions affecting environmental exposure

Local marine water dilution factor: 100
Local freshwater dilution factor: 10
Receiving surface water flow: 18000 m³/day
Covers indoor and outdoor use

1.2. CS2: Worker Contributing Scenario: Equipment cleaning and maintenance - Roller, spreader, flow application (PROC11)

Process Categories	Non industrial spraying (PROC11)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
< 10000 Pa

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

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
Closed systems
Open systems

Other conditions affecting worker exposure

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

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:
Wear suitable respiratory protection.

1.2. CS3: Worker Contributing Scenario: Equipment cleaning and maintenance - Rolling, Brushing - Material transfers (PROC8a, PROC10)

Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Roller application or brushing (PROC8a, PROC10)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
< 10000 Pa

Concentration of substance in product:
Covers percentage substance in the product up to 25 %.

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
Closed systems
Open systems

Other conditions affecting worker exposure

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)

Release route	Release rate	Release estimation method
N/A	N/A	ESVOC SPERC 8.3b.v1

1.3. CS2: Worker Contributing Scenario: Equipment cleaning and maintenance - Roller, spreader, flow application (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, long-term	= 242 mg/m³	ECETOC TRA worker v3	= 0.504

1.3. CS3: Worker Contributing Scenario: Equipment cleaning and maintenance - Rolling, Brushing - Material transfers (PROC8a, PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, long-term	= 290.4 mg/m³	ECETOC TRA worker v3	= 0.605

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)

1.1 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

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)

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)

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)

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)

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)

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.