

Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

KERAKOVER ACRILSILOSSANICO

Date of first edition: 3/3/2021

Safety Data Sheet dated 11/17/2021

version 5

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

1.1. Product identifier

Mixture identification:

Trade name: KERAKOVER ACRILSILOSSANICO

Trade code: 16112021

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

Recommended use: Mineral Paint coatings and Coverings - Siloxane range

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.
Skin Irrit. 2	Causes skin irritation.
Eye Irrit. 2	Causes serious eye irritation.
STOT SE 3	May cause respiratory irritation.
STOT SE 3	May cause drowsiness or dizziness.
STOT RE 2	May cause damage to organs through prolonged or repeated exposure.
Asp. Tox. 1	May be fatal if swallowed and enters airways.
Aquatic Chronic 3	Harmful to aquatic life with long lasting effects.

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.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe vapours.
P280	Wear protective gloves and eye protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370+P378	In case of fire, use a CO2 fire extinguisher to extinguish.
P501	Dispose of contents/container in accordance with applicable regulations.

Contains

Reaction mass of ethylbenzene and m-xylene and p-xylene

Hydrocarbons, C9, aromatics

Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics

propan-2-ol; isopropyl alcohol; isopropanol

Dir. 2004/42/EC (VOC directive)

Binding primers

EU limit value for this product (cat. A/h): 750 g/l

This product contains max 716.41 g/l VOC.

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 $\geq 0.1\%$.

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: KERAKOVER ACRILSILOSSANICO

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

Qty	Name	Ident. Numb.	Classification	Registration Number
25-50 %	Reaction mass of ethylbenzene and m-xylene and p-xylene	EC:905-562-9	Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; Asp. Tox. 1, H304; STOT RE 2, H373	01-2119555267-33
20-24,9 %	Hydrocarbons, C9, aromatics	EC:918-668-5	Flam. Liq. 3, H226; STOT SE 3, H335; STOT SE 3, H336; Asp. Tox. 1, H304; Aquatic Chronic 2, H411, M-Chronic:1, EUH066	01-2119455851-35
5-9,9 %	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 %	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
5-9,9 %	Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2%	EC:920-107-4	Asp. Tox. 1, H304, EUH066	

aromatics

2,5-4,9 %	2-methoxy-1-methylethyl acetate	CAS:108-65-6 EC:203-603-9	Flam. Liq. 3, H226; STOT SE 3, H336	01-2119475791-29
1-2,4 %	xylene	CAS:1330-20-7 EC:215-535-7 Index:601-022-00-9	Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315; STOT SE 3, H335; STOT RE 2, H373; Asp. Tox. 1, H304; Aquatic Chronic 3, H412; Eye Irrit. 2, H319, M-Chronic:1	01-2119488216-32
< 1 %	tetraethyl silicate; ethyl silicate	CAS:78-10-4 EC:201-083-8 Index:014-005-00-0	Flam. Liq. 3, H226; Eye Irrit. 2, H319; STOT SE 3, H335; Acute Tox. 4, H332	01-2119496195-28
< 1 %	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	01-2119457435-35
< 0,1 %	methanol	CAS:67-56-1 EC:200-659-6 Index:603-001-00-X	Flam. Liq. 2, H225 STOT SE 1, H370 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 Specific Concentration Limits: C ≥ 10%: STOT SE 1 H370 3% ≤ C < 10%: STOT SE 2 H371	01-2119433307-44

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

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

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

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

In case of eyes contact:

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

Protect uninjured eye.

In case of Ingestion:

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

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

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

Eye irritation

Eye damages

Skin Irritation

Erythema

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 CO2 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.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Provide adequate ventilation.
Use appropriate respiratory protection.
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, inhalation of vapours and mists.
Use localized ventilation system.
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.
Contaminated 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.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

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
Reaction mass of ethylbenzene and m-xylene and p-xylene	ACGIH	NNN			100		150	A4, BEI - URT and eye irr, CNS impair
	EU	NNN		221	50	442	100	Skin
	NATIONAL	AUSTRALIA		350.000	80.000	655.000	150.000	
	NATIONAL	AUSTRIA		221.000	50.000	442.000	100.000	
	NATIONAL	BELGIUM		221.000	50.000	442.000	100.000	
	NATIONAL	CANADA			100.000		150.000	Ontario
	NATIONAL	CANADA		434.000	100.000	651.000	150.000	Québec
	NATIONAL	DENMARK		109.000	25.000	442.000	100.000	
	NATIONAL	FINLAND		220.000	50.000	440.000	100.000	
	NATIONAL	FRANCE		221.000	50.000	442.000	100.000	

NATIONAL	GERMANY	440.000	100.000	880.000	200.000	AGS
NATIONAL	GERMANY	440.000	100.000	880.000	200.000	DFG
NATIONAL	HUNGARY	221.000		442.000		
NATIONAL	IRELAND	221.000	50.000	442.000	100.000	
NATIONAL	ISRAEL	434.000	100.000	442.000	100.000	
NATIONAL	ITALY	221.000	50.000	442.000	100.000	
NATIONAL	JAPAN		100.000			MHLW
NATIONAL	JAPAN	217.000	50.000			JSOH
NATIONAL	LATVIA	221.000	50.000	442.000	100.000	
NATIONAL	NEW ZEALAND	217.000	50.000			
NATIONAL	CHINA		50.000		100.000	
NATIONAL	POLAND		100.000			
NATIONAL	ROMANIA	221.000	50.000	442.000	100.000	
NATIONAL	SINGAPORE	434.000	100.000	651.000	150.000	
NATIONAL	KOREA, REPUBLIC OF	435.000	100.000	655.000	150.000	
NATIONAL	SPAIN	221.000	50.000	442.000	100.000	
NATIONAL	SWEDEN	221.000	50.000	442.000	100.000	
NATIONAL	SWITZERLAND	435.000	100.000	870.000	200.000	
NATIONAL	NETHERLANDS	210.000		442.000		
NATIONAL	TURKEY	221.000	50.000	442.000	100.000	
NATIONAL	UNITED STATES OF AMERICA	435.000	100.000	655.000	150.000	NIOSH
NATIONAL	UNITED STATES OF AMERICA	435.000	100.000			OSHA
NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	220.000	50.000	441.000	100.000	
NATIONAL	ARGENTINA		100.000		150.000	
NATIONAL	BULGARIA	221.000	50.000	445.000	100.000	
NATIONAL	CZECHIA	200.000		400.000		
NATIONAL	CHILE	380.000	87.000	621.000	150.000	
NATIONAL	CROATIA	221.000	50.000	442.000	100.000	
NATIONAL	ESTONIA	200.000	50.000	450.000	100.000	
NATIONAL	GREECE	435.000	100.000	650.000	150.000	
NATIONAL	INDONESIA	434.000	100.000	651.000	150.000	
NATIONAL	ICELAND	109.000	25.000	442.000	100.000	
NATIONAL	LITHUANIA	221.000	50.000	442.000	100.000	
NATIONAL	MEXICO		100.000		150.000	
NATIONAL	NORWAY	108.000	25.000			
NATIONAL	PORTUGAL		100.000		150.000	
NATIONAL	RUSSIAN FEDERATION	50.000		150.000		
NATIONAL	SLOVAKIA	221.000	50.000	442.000	100.000	
NATIONAL	SLOVENIA	221.000	50.000	442.000	100.000	
NATIONAL	SOUTH	218.000	50.000	435.000	100.000	

		AFRICA					
	NATIONAL	TAIWAN, PROVINCE OF CHINA	434.000	100.000			
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	SWITZERLA ND	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	

propan-2-ol; isopropyl alcohol; isopropanol	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
	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	999.000	400.000	1250.000	500.000	

2-methoxy-1-methylethyl acetate	IRELAND					
	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					
	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
	NATIONAL	GERMANY	270.000	50.000	270.000	100.000
	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

xylene	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 FEDERATIO N				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
	EU	NNN	221	50	442	100	Skin
	NATIONAL	AUSTRIA	221.000	50.000	442.000	100.000	
	NATIONAL	BELGIUM	221.000	50.000	442.000	100.000	
	NATIONAL	CANADA		100.000		150.000	Ontario
	NATIONAL	CANADA	434.000	100.000	651.000	150.000	Québec
	NATIONAL	DENMARK	109.000	25.000	442.000	100.000	
	NATIONAL	FINLAND	220.000	50.000	440.000	100.000	
	NATIONAL	FRANCE	221.000	50.000	442.000	100.000	
	NATIONAL	GERMANY	440.000	100.000	880.000	200.000	AGS
	NATIONAL	GERMANY	440.000	100.000	880.000	200.000	DFG
	NATIONAL	HUNGARY	221.000		442.000		
	NATIONAL	IRELAND	221.000	50.000	442.000	100.000	
	NATIONAL	ISRAEL	434.000	100.000	442.000	100.000	
	NATIONAL	ITALY	221.000	50.000	442.000	100.000	
	NATIONAL	JAPAN		100.000			MHLW
	NATIONAL	JAPAN	217.000	50.000			JSOH
	NATIONAL	LATVIA	221.000	50.000	442.000	100.000	
	NATIONAL	NEW ZEALAND	217.000	50.000			
	NATIONAL	CHINA		50.000		100.000	
	NATIONAL	POLAND		100.000			
	NATIONAL	ROMANIA	221.000	50.000	442.000	100.000	
	NATIONAL	SINGAPORE	434.000	100.000	651.000	150.000	
	NATIONAL	KOREA, REPUBLIC OF	435.000	100.000	655.000	150.000	
	NATIONAL	SPAIN	221.000	50.000	442.000	100.000	
	NATIONAL	SWEDEN	221.000	50.000	442.000	100.000	
	NATIONAL	SWITZERLA ND	435.000	100.000	870.000	200.000	
	NATIONAL	NETHERLA NDS	210.000		442.000		
	NATIONAL	TURKEY	221.000	50.000	442.000	100.000	
	NATIONAL	UNITED STATES OF AMERICA	435.000	100.000	655.000	150.000	NIOSH
	NATIONAL	UNITED	435.000	100.000			OSHA

tetraethyl silicate; ethyl silicate	NATIONAL	STATES OF AMERICA					
		UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	220.000	50.000	441.000	100.000	
	NATIONAL	ARGENTINA		100.000		150.000	
	NATIONAL	BULGARIA	221.000	50.000	445.000	100.000	
	NATIONAL	CZECHIA	200.000		400.000		
	NATIONAL	CHILE	380.000	87.000	621.000	150.000	
	NATIONAL	CROATIA	221.000	50.000	442.000	100.000	
	NATIONAL	ESTONIA	200.000	50.000	450.000	100.000	
	NATIONAL	GREECE	435.000	100.000	650.000	150.000	
	NATIONAL	INDONESIA	434.000	100.000	651.000	150.000	
	NATIONAL	ICELAND	109.000	25.000	442.000	100.000	
	NATIONAL	LITHUANIA	221.000	50.000	442.000	100.000	
	NATIONAL	MEXICO		100.000		150.000	
	NATIONAL	NORWAY	108.000	25.000			
	NATIONAL	PORTUGAL		100.000		150.000	
	NATIONAL	RUSSIAN FEDERATION	50.000		150.000		
	NATIONAL	SLOVAKIA	221.000	50.000	442.000	100.000	
	NATIONAL	SLOVENIA	221.000	50.000	442.000	100.000	
	NATIONAL	SOUTH AFRICA	218.000	50.000	435.000	100.000	
	NATIONAL	TAIWAN, PROVINCE OF CHINA	434.000	100.000			
	ACGIH	NNN		100		150	A4, BEI - URT and eye irr, CNS impair
	EU	NNN	221	50	442	100	Skin
	EU	NNN	44	5			
	NATIONAL	AUSTRIA	44.000	5.000	88.000	10.000	
	NATIONAL	BELGIUM	44.000	5.000			
	NATIONAL	CANADA		10.000			Ontario
	NATIONAL	CANADA	85.000	10.000			Québec
	NATIONAL	DENMARK	85.000	10.000	170.000	20.000	
	NATIONAL	FINLAND	43.000	5.000	86.000	10.000	
	NATIONAL	FRANCE	44.000	5.000			
	NATIONAL	GERMANY	12.000	1.400	12.000	1.400	AGS
	NATIONAL	GERMANY	86.000	10.000	86.000	10.000	DFG
	NATIONAL	IRELAND	85.000	10.000	255.000	30.000	
	NATIONAL	JAPAN	85.000	10.000			
	NATIONAL	LATVIA	44.000	5.000			
	NATIONAL	NEW ZEALAND	85.000	10.000			
	NATIONAL	POLAND	80.000				
	NATIONAL	ROMANIA	44.000	5.000			
	NATIONAL	SINGAPORE	85.000	10.000			
	NATIONAL	KOREA, REPUBLIC OF	85.000	10.000			

1-methoxy-2-propanol; monopropylene glycol methyl ether	NATIONAL	SPAIN	87.000	10.000			
	NATIONAL	SWEDEN	44.000	5.000			
	NATIONAL	SWITZERLAND	44.000	5.000			
	NATIONAL	UNITED STATES OF AMERICA	85.000	10.000			NIOSH
	NATIONAL	UNITED STATES OF AMERICA	850.000	100.000			OSHA
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	44.000	5.000			
	NATIONAL	ARGENTINA		10.000			
	NATIONAL	BULGARIA	44.000	5.000			
	NATIONAL	CZECHIA	50.000		200.000		
	NATIONAL	CROATIA	44.000	5.000			
	NATIONAL	ESTONIA	44.000	5.000			
	NATIONAL	GREECE	44.000	5.000			
	NATIONAL	INDONESIA		10.000			
	NATIONAL	ICELAND	44.000	5.000			
	NATIONAL	LITHUANIA	44.000	5.000			
	NATIONAL	MALAYSIA	85.000	10.000			
	NATIONAL	MEXICO		10.000			
	NATIONAL	NORWAY	44.000	5.000			
	NATIONAL	NETHERLANDS	44.000				
	NATIONAL	PORTUGAL		10.000			
	NATIONAL	RUSSIAN FEDERATION			20.000		
	NATIONAL	SLOVAKIA	44.000	5.000			
	NATIONAL	SLOVENIA	44.000	5.000	44.000	5.000	
	NATIONAL	SOUTH AFRICA	85.000	10.000	255.000	10.000	
	ACGIH	NNN		10			URT and eye irr, kidney dam
	EU	NNN	44	5			
	NATIONAL	ITALY	44.000	5.000			
	EU	NNN	375	100	563	150	Skin
	NATIONAL	AUSTRIA	187.000	50.000	187.000	50.000	
	NATIONAL	BELGIUM	184.000	50.000	369.000	100.000	
	NATIONAL	CANADA		100.000		150.000	Ontario
	NATIONAL	CANADA	369.000	100.000	553.000	150.000	Québec
	NATIONAL	DENMARK	185.000	50.000	370.000	100.000	
	NATIONAL	FINLAND	370.000	100.000	560.000	150.000	
	NATIONAL	FRANCE	188.000	50.000	375.000	100.000	
	NATIONAL	GERMANY	370.000	100.000	740.000	200.000	AGS
	NATIONAL	GERMANY	370.000	100.000	740.000	200.000	DFG
	NATIONAL	HUNGARY	375.000		568.000		
	NATIONAL	IRELAND	375.000	100.000	568.000	150.000	

methanol	NATIONAL	ISRAEL	369.000	100.000			
	NATIONAL	ITALY	375.000	100.000	568.000	150.000	
	NATIONAL	LATVIA	375.000	100.000	568.000	150.000	
	NATIONAL	NEW ZEALAND	369.000	100.000	553.000	150.000	
	NATIONAL	ROMANIA	375.000	100.000	568.000	150.000	
	NATIONAL	KOREA, REPUBLIC OF	360.000	100.000	540.000	150.000	
	NATIONAL	SPAIN	375.000	100.000	568.000	150.000	
	NATIONAL	SWEDEN	190.000	50.000	568.000	150.000	
	NATIONAL	SWITZERLAND	360.000	100.000	720.000	200.000	
	NATIONAL	NETHERLANDS	375.000		563.000		
	NATIONAL	TURKEY	375.000	100.000	568.000	150.000	
	NATIONAL	UNITED STATES OF AMERICA	360.000	100.000	540.000	150.000	
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	375.000	100.000	560.000	150.000	
	NATIONAL	ARGENTINA		100.000		150.000	
	NATIONAL	BULGARIA	375.000	100.000	568.000	150.000	
	NATIONAL	CZECHIA	270.000		550.000		
	NATIONAL	CROATIA	375.000	100.000	568.000	150.000	
	NATIONAL	ESTONIA	375.000	100.000	568.000	150.000	
	NATIONAL	GREECE	360.000	100.000	1080.000	300.000	
	NATIONAL	INDONESIA		100.000		150.000	
	NATIONAL	ICELAND	185.000	50.000	568.000	150.000	
	NATIONAL	LITHUANIA	190.000	50.000	300.000	75.000	
	NATIONAL	MALAYSIA	369.000	100.000			
	NATIONAL	MEXICO		100.000		150.000	
	NATIONAL	NORWAY	180.000	50.000			
	ACGIH	NNN		50		100	A4 - Eye and URT irr
	EU	NNN	375	100	563	150	Skin
	EU	NNN	260	200			Skin
	NATIONAL	AUSTRIA	260.000	200.000	1040.000	800.000	
	NATIONAL	BELGIUM	266.000	200.000	333.000	250.000	Additional indication "D" means that the absorption of the agent through the skin, mucous membranes or eyes is an important part of the total exposure. It can be the result of both direct contact and its presence in the air
	NATIONAL	CANADA		200.000		250.000	Ontario
	NATIONAL	CANADA	262.000	200.000	328.000	250.000	Quebec
	NATIONAL	DENMARK	260.000	200.000	328.000	250.000	
	NATIONAL	FINLAND	270.000	200.000	330.000	250.000	
	NATIONAL	FRANCE	260.000	200.000			Bold type: Restrictive statutory limit values Skin
	NATIONAL	GERMANY	270.000	200.000	1080.000	800.000	AGS
	NATIONAL	GERMANY	130.000	100.000	260.000	200.000	DFG

NATIONAL	HUNGARY	260.000					
NATIONAL	IRELAND	260.000	200.000				
NATIONAL	ITALY	260.000	200.000				
NATIONAL	JAPAN		200.000			MHLW	
NATIONAL	JAPAN	260.000	200.000			JSOH	
NATIONAL	LATVIA	260.000	200.000				
NATIONAL	NEW ZEALAND	262.000	200.000	328.000	250.000		
NATIONAL	CHINA	25.000		50.000			
NATIONAL	POLAND	100.000		300.000			
NATIONAL	ROMANIA	260.000	200.000				
NATIONAL	SINGAPORE	262.000	200.000	328.000	250.000		
NATIONAL	KOREA, REPUBLIC OF	260.000	200.000	310.000	250.000		
NATIONAL	SPAIN	266.000	200.000	333.000	250.000		
NATIONAL	SWEDEN	250.000	200.000	350.000	250.000		
NATIONAL	SWITZERLAND	260.000	200.000	1040.000	800.000		
NATIONAL	NETHERLANDS	133.000					
NATIONAL	TURKEY	260.000	200.000				
NATIONAL	UNITED STATES OF AMERICA	260.000	200.000	325.000	250.000	NIOSH	
NATIONAL	UNITED STATES OF AMERICA	260.000	200.000			OSHA	
NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	266.000	200.000	333.000	250.000		
NATIONAL	ITALY	262.000	200.000	328.000	250.000	TWA	
NATIONAL	ITALY	260.000	200.000	1040.000	800.000	TLV	
NATIONAL	ARGENTINA		200.000		250.000		
NATIONAL	BULGARIA	260.000	200.000				
NATIONAL	CZECHIA	250.000		1000.000			
NATIONAL	CHILE	229.000	175.000	328.000	230.000		
NATIONAL	CROATIA	260.000	200.000				
NATIONAL	ESTONIA	250.000	200.000	350.000	250.000		
NATIONAL	GREECE	260.000	200.000	325.000	250.000		
NATIONAL	INDONESIA		200.000		250.000		
NATIONAL	IRELAND	260.000	200.000				
NATIONAL	ICELAND	260.000	200.000				
NATIONAL	LITHUANIA	260.000	200.000				
NATIONAL	MALAYSIA	262.000	200.000				
NATIONAL	MEXICO		200.000		250.000		
NATIONAL	NORWAY	130.000	100.000				
NATIONAL	PORTUGAL		200.000		250.000		
ACGIH	NNN		200		250	Skin, BEI - Headache, eye dam, dizziness, nausea	
EU	NNN	260	200			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
1330-20-7	xylene	2000	mg/L	Urine	Methyl hippuric acid in urine	End of turn
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether	20	mg/L	Urine	1-Methoxypropanol-2	End of turn
67-56-1	methanol	30	mg/L	Urine	Methyl alcohol	End of turn; End of working week

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency
Reaction mass of ethylbenzene and m-xylene and p-xylene		44.000 µg/l	Freshwater	
		10.000 µg/l	Intermittent releases (freshwater)	
		4.400 µg/l	Marine water	
		1.000 µg/l	Intermittent releases (marine water)	
		1.600 mg/l	Microorganisms in sewage treatments	
		2.520 mg/kg	Freshwater sediments	
		252.000 µg/kg	Marine water sediments	
n-butyl acetate	123-86-4	852.000 µg/kg	Soil	
		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	
propan-2-ol; isopropyl alcohol; isopropanol	67-63-0	90.300 µg/kg	Soil	
		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	
2-methoxy-1-methylethyl acetate	108-65-6	28.000 mg/kg	Soil	
		160.000 mg/kg	Secondary poisoning	
		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	

xylene	1330-20-7	3.290 mg/kg	Freshwater sediments
		329.000 µg/kg	Marine water sediments
		290.000 µg/kg	Soil
		327.000 µg/l	Freshwater
		327.000 µg/l	Intermittent releases (freshwater)
		327.000 µg/l	Marine water
tetraethyl silicate; ethyl silicate	78-10-4	6.580 mg/l	Microorganisms in sewage treatments
		12.460 mg/kg	Freshwater sediments
		12.460 mg/kg	Marine water sediments
		2.310 mg/kg	Soil
		190.000 µg/l	Freshwater
		10.000 mg/l	Intermittent releases (freshwater)
1-methoxy-2-propanol; monopropylene glycol methyl ether	107-98-2	19.000 µg/l	Marine water
		4000.000 mg/l	Microorganisms in sewage treatments
		830.000 µg/kg	Freshwater sediments
		83.000 µg/kg	Marine water sediments
		50.000 µg/kg	Soil
		10.000 mg/l	Freshwater
methanol	67-56-1	100.000 mg/l	Intermittent releases (freshwater)
		1.000 mg/l	Marine water
		100.000 mg/l	Microorganisms in sewage treatments
		52.300 mg/kg	Freshwater sediments
		5.200 mg/kg	Marine water sediments
		4.590 mg/kg	Soil
		20.800 mg/l	Freshwater
		1540.000 mg/l	Intermittent releases (freshwater)
		2.080 mg/l	Marine water
		100.000 mg/l	Microorganisms in sewage treatments
		77.000 mg/kg	Freshwater sediments
		7.700 mg/kg	Marine water sediments
		100.000 mg/kg	Soil

Derived No Effect Level (DNEL) values

Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency
Reaction mass of ethylbenzene and m-xylene and p-xylene			221.000 mg/m ³	65.300 mg/m ³	Human Inhalation	Long Term, systemic effects
			442.000 mg/m ³	260.000 mg/m ³	Human Inhalation	Short Term, systemic effects
			221.000 mg/m ³	65.300 mg/m ³	Human Inhalation	Long Term, local effects
			442.000 mg/m ³	260.000 mg/m ³	Human Inhalation	Short Term, local effects

Hydrocarbons, C9, aromatics			212.000 mg/kg	125.000 mg/kg	Human Dermal	Long Term, systemic effects
				2.500 mg/kg	Human Oral	Long Term, systemic effects
			150.000 mg/m ³	32.000 mg/m ³	Human Inhalation	Long Term, systemic effects
			25.000 mg/kg	11.000 mg/kg	Human Dermal	Long Term, systemic effects
n-butyl acetate	123-86-4			11.000 mg/kg	Human Oral	Long Term, systemic effects
			48.000 mg/m ³	12.000 mg/m ³	Human Inhalation	Long Term, systemic effects
			600.000 mg/m ³	300.000 mg/m ³	Human Inhalation	Short Term, systemic effects
			300.000 mg/m ³	35.700 mg/m ³	Human Inhalation	Long Term, local effects
			600.000 mg/m ³	300.000 mg/m ³	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
				89.000 mg/m ³	Human Inhalation	Long Term, systemic effects
propan-2-ol; isopropyl alcohol; isopropanol	67-63-0			319.000 mg/kg	Human Dermal	Long Term, systemic effects
				26.000 mg/kg	Human Oral	Long Term, systemic effects
			275.000 mg/m ³	33.000 mg/m ³	Human Inhalation	Long Term, systemic effects
			550.000 mg/m ³		Human Inhalation	Short Term, systemic effects
2-methoxy-1-methylethyl acetate	108-65-6			33.000 mg/m ³	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
xylene	1330-20-7		221.000 mg/m ³	65.300 mg/m ³	Human Inhalation	Long Term, systemic effects
			442.000 mg/m ³	260.000 mg/m ³	Human Inhalation	Short Term, systemic effects
			221.000 mg/m ³	65.300 mg/m ³	Human Inhalation	Long Term, local effects
			442.000 mg/m ³	260.000 mg/m ³	Human Inhalation	Short Term, local effects
			212.000 mg/kg	125.000 mg/kg	Human Dermal	Long Term, systemic effects
				12.500 mg/kg	Human Oral	Long Term, systemic effects

tetraethyl silicate; ethyl silicate	78-10-4		14.000 mg/m ³	Human Inhalation	Long Term, systemic effects
			14.000 mg/m ³	Human Inhalation	Short Term, systemic effects
		56.000 mg/kg	3.000 mg/kg	Human Dermal	Long Term, systemic effects
		56.000 mg/kg	3.000 mg/kg	Human Dermal	Short Term, systemic effects
1-methoxy-2-propanol; monopropylene glycol methyl ether	107-98-2	369.000 mg/m ³	43.900 mg/m ³	Human Inhalation	Long Term, systemic effects
		553.500 mg/m ³		Human Inhalation	Short Term, systemic effects
		553.500 mg/m ³		Human Inhalation	Short Term, local effects
		183.000 mg/kg	78.000 mg/kg	Human Dermal	Long Term, systemic effects
methanol	67-56-1		33.000 mg/kg	Human Oral	Long Term, systemic effects
		130.000 mg/m ³	26.000 mg/m ³	Human Inhalation	Long Term, systemic effects
		130.000 mg/m ³	26.000 mg/m ³	Human Inhalation	Short Term, systemic effects
		130.000 mg/m ³	26.000 mg/m ³	Human Inhalation	Long Term, local effects
		130.000 mg/m ³	26.000 mg/m ³	Human Inhalation	Short Term, local effects
		20.000 mg/kg	4.000 mg/kg	Human Dermal	Long Term, systemic effects
		20.000 mg/kg	4.000 mg/kg	Human Dermal	Short Term, systemic effects
			4.000 mg/kg	Human Oral	Long Term, systemic effects
			4.000 mg/kg	Human Oral	Short Term, systemic effects

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

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

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

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: In compliance with the product description

Odour: Characteristic

Odour threshold: N.A.

pH: N.A.
Kinematic viscosity: $\leq 20,5 \text{ mm}^2/\text{sec}$ (40 °C)
Melting point / freezing point: N.A.
Initial boiling point and boiling range: $> 36 \text{ °C}$ (97 °F)
Flash point: 10 °C (50 °F)
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Vapour pressure: N.A.
Relative density: 0.89 g/cm^3
Solubility in water: N.A.
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 = 80.95% ; 716.41 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

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

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	The product is classified: Skin Irrit. 2(H315)
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(H335), STOT SE 3(H336)
i) STOT-repeated exposure	The product is classified: STOT RE 2(H373)
j) aspiration hazard	The product is classified: Asp. Tox. 1(H304)

Toxicological information on main components of the mixture:

Reaction mass of ethylbenzene and m-xylene and p-xylene	a) acute toxicity	LD50 Oral Rat = 3523.00 ml/Kg
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		LC50 Inhalation Vapour Rat = 27124.00 mg/m3 4h	
		LD50 Skin Rabbit = 12126.00 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes 1h	
	f) carcinogenicity	Genotoxicity Negative	Mouse subcutaneous route
	g) reproductive toxicity	No Observed Adverse Effect Level Inhalation Rat = 500.00	ppm
Hydrocarbons, C9, aromatics	a) acute toxicity	LD50 Oral Rat = 4.00 ml/Kg	
		LC50 Inhalation Vapour Rat > 6193.00 mg/m3 4h	
		LD50 Skin Rabbit > 3160.00 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 Guinea pig Negative	
	f) carcinogenicity	Genotoxicity Rat Negative	Inhalation route
	g) reproductive toxicity	No Observed Adverse Effect Level Inhalation Rat = 7500.00 mg/m3	
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
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 Guinea pig Negative	
	f) carcinogenicity	Genotoxicity Negative	Mouse intraperitoneal route
		Carcinogenicity = 5000.00 Ppm	NOEC for mouse
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 Guinea pig Negative	

	g) reproductive toxicity	No Observed Effect Level Rat = 3.69000 mg/l	Inhalation route
xylene	a) acute toxicity	LD50 Oral Rat = 3523.00 ml/Kg LC50 Inhalation Vapour Rat = 29000.00 mg/m3 4h LD50 Skin Rabbit = 12126.00 mg/kg 24h	
	b) skin corrosion/irritation	Skin Corrosive Rabbit Negative 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes 1h	
	f) carcinogenicity	Genotoxicity Negative	Mouse subcutaneous route
	g) reproductive toxicity	No Observed Adverse Effect Level Inhalation Rat = 2171.00 mg/kg	
tetraethyl silicate; ethyl silicate	a) acute toxicity	LD50 Oral Rat > 2500.00 mg/kg LC50 Inhalation of aerosol Rat = 10.00 mg/l 4h LD50 Skin Rabbit = 6.30 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 Adverse Effect Level Oral = 12.50 mg/kg	Mouse
1-methoxy-2-propanol; monopropylene glycol methyl ether	a) acute toxicity	LD50 Oral Rat = 4016.00 mg/kg LC50 Inhalation Vapour Rat Negative 6h LD50 Skin Rat > 2000.00 mg/kg	No mortalities observed
	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	
	f) carcinogenicity	Genotoxicity Carcinogenicity Negative	Mouse intraperitoneal route
	g) reproductive toxicity	No Observed Adverse Effect Level Inhalation Rat = 300.00	ppm
methanol	a) acute toxicity	LD50 Oral Rat >= 2528.00000 mg/kg LC50 Inhalation = 43.68000 mg/l 6h LD50 Skin Rabbit = 17100.00000 mg/kg	Cat
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative	
	c) serious eye damage/irritation	Eye Irritant Rabbit No	
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative	
	f) carcinogenicity	Genotoxicity Negative Carcinogenicity Rat Negative	Mouse intraperitoneal route
	g) reproductive toxicity	Lowest Observed Adverse Effect Level Oral = 1000.00000 mg/kg	Mouse

11.2 Information on other hazards

Endocrine disrupting properties:

SECTION 12: Ecological information**12.1. Toxicity**

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

Eco-Toxicological Information:

Harmful to aquatic life with long lasting effects.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 3(H412)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
Reaction mass of ethylbenzene and m-xylene and p-xylene	EINECS: 905-562-9	a) Aquatic acute toxicity : LC50 Fish Danio rerio = 0.71 mg/L 96h OECD Guideline 210 b) Aquatic chronic toxicity : NOEC Fish freshwater fish = 1.30 mg/L - 56days a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 1.00 mg/L 24h OECD 202 b) Aquatic chronic toxicity : NOEC Daphnia Ceriodaphnia dubia = 1.17 mg/L OECD 211 - 7days a) Aquatic acute toxicity : EC50 Algae freshwater algae = 2.20 mg/L 72h OECD 201 a) Aquatic acute toxicity : EC50 microorganisms = 16.00 mg/L OECD 301F - 28days
Hydrocarbons, C9, aromatics	EINECS: 918-668-5	d) Terrestrial toxicity : LC50 soil macroorganisms = 88.80 mg/kg - 14days a) Aquatic acute toxicity : LL50 Fish Oncorhynchus mykiss = 9.20 mg/L 96h b) Aquatic chronic toxicity : NOELR Fish = 1.23 mg/L - 28days a) Aquatic acute toxicity : EL50 Daphnia Daphnia magna = 21.30 mg/L 48h b) Aquatic chronic toxicity : NOELR freshwater invertebrate = 2.14 mg/L - 21days a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 2.90 mg/L a) Aquatic acute toxicity : EL50 Tetrahymena pyriformis = 4.73 mg/L 48h
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
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
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
xylene	CAS: 1330-20-7 - EINECS: 215-535-7 - INDEX: 601-022-00-9	a) Aquatic acute toxicity : LC50 Fish freshwater fish = 2.60 mg/L 96h OECD 203
		b) Aquatic chronic toxicity : NOEC Fish freshwater fish = 1.30 mg/L - 56days
		a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 1.00 mg/L 24h OECD 202
		b) Aquatic chronic toxicity : NOEC Daphnia Ceriodaphnia dubia = 0.96 mg/L - 7days
		a) Aquatic acute toxicity : EC50 Algae freshwater algae = 1.30 mg/L 48h OECD 201
		a) Aquatic acute toxicity : EC50 microorganisms = 96.00 mg/L OECD 301F
		d) Terrestrial toxicity : NOEC Worm earthworms = 16.00 mg/kg - 14days
		e) Plant toxicity : LC50 terrestrial plants = 1.00 mg/kg - 14days
tetraethyl silicate; ethyl silicate	CAS: 78-10-4 - EINECS: 201-083-8 - INDEX: 014-005-00-0	a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio > 245.00 mg/L 96h
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna > 75.00 mg/L 48h
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchnerella subcapitata > 22.00 mg/L 72h
		a) Aquatic acute toxicity : EC50 Sludge activated sludge > 100.00 mg/L 3h OECD 209
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 Leuciscus idus = 6812.00 mg/L OECD guideline 203
		a) Aquatic acute toxicity : LC50 Daphnia = 23300.00 mg/L 48h OECD guideline 202
		a) Aquatic acute toxicity : EC50 Algae = 1000.00 mg/L OECD guideline 201 - 7days
		a) Aquatic acute toxicity : NOEC Sludge = 1000.00 mg/L OECD guideline 201
methanol	CAS: 67-56-1 - EINECS: 200-659-6 - INDEX: 603-001-00-X	a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 15400.00000 mg/L 96h
		b) Aquatic chronic toxicity : NOEC Fish = 450.00000 mg/L
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 22200.00000 mg/L 48h
		b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna = 208.00000 mg/L
		a) Aquatic acute toxicity : EC50 Algae Selenastrum capricornutum = 22000.00000 mg/L 96h OECD 201 Guideline.
		d) Terrestrial toxicity : NOEC Worm Eisenia andrei = 10000.00000 mg/kg
		d) Terrestrial toxicity : NOEC Folsomia candida = 1000.00000 mg/kg OECD Guideline 232

12.2. Persistence and degradability

Component	Persistence/Degradability Test	Value	Notes
Reaction mass of ethylbenzene and m-xylene and p-xylene	Readily biodegradable		

Hydrocarbons, C9, aromatics	Non-readily biodegradable		78.000	
n-butyl acetate	Readily biodegradable		83.000	%; OECD 301 D
propan-2-ol; isopropyl alcohol; isopropanol	Readily biodegradable	Biochemical oxygen demand		
2-methoxy-1-methylethyl acetate	Readily biodegradable	Dissolved organic carbon		OECD GL 301E
xylene	Readily biodegradable			
tetraethyl silicate; ethyl silicate	Persistent and Biodegradable	Dissolved organic carbon	98.000	28days
1-methoxy-2-propanol; monopropylene glycol methyl ether	Readily biodegradable		69.000	28days
methanol	Readily biodegradable			

12.3. Bioaccumulative potential

Component	Bioaccumulation	Test	Value	Notes
Reaction mass of ethylbenzene and m-xylene and p-xylene	Bioaccumulative	BCF - Bioconcentration factor	25.900	
n-butyl acetate	Bioaccumulative	BCF - Bioconcentration factor		
xylene	Bioaccumulative	BCF - Bioconcentration factor	25.900	
methanol	Not bioaccumulative	BCF - Bioconcentration factor		< 10

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 $\geq 0.1\%$

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 14: Ecotoxic; HP 3: Flammable; HP 4: Irritant — skin irritation and eye damage; HP 5: Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

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 exempt: No

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: 69, 75

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

Seveso III category according to Annex 1, part 1

Product belongs to category: P5c 5000

50000

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

No Substance Listed

German Water Hazard Class.

Class 1: slightly hazardous for water.

SVHC Substances:

No data available

Dir. 2004/42/EC (VOC directive)

(ready to use)

Volatile Organic compounds - VOCs = 80.95 %

Volatile Organic compounds - VOCs = 716.41 g/L

15.2. Chemical safety assessment

No 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.
H301	Toxic if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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
3.1/3/Dermal	Acute Tox. 3	Acute toxicity (dermal), Category 3
3.1/3/Inhal	Acute Tox. 3	Acute toxicity (inhalation), Category 3
3.1/3/Oral	Acute Tox. 3	Acute toxicity (oral), Category 3
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.8/1	STOT SE 1	Specific target organ toxicity — single exposure, Category 1
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
3.9/2	STOT RE 2	Specific target organ toxicity — repeated exposure, Category 2
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation Classification procedure

(EC) Nr. 1272/2008

2.6/2	On basis of test data
3.2/2	Calculation method
3.3/2	Calculation method
3.8/3	Calculation method
3.8/3	Calculation method
3.9/2	Calculation method
3.10/1	Calculation method
4.1/C3	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.

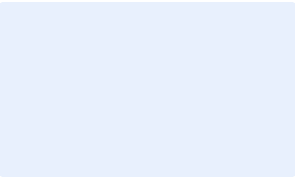
LDLo: Leathal Dose Low

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:

- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 4. FIRST AID MEASURES
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 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

Table of contents

1. ES 1

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
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Worker Contributing Scenario

CS2 Large surfaces - Rolling, Brushing	PROC10
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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

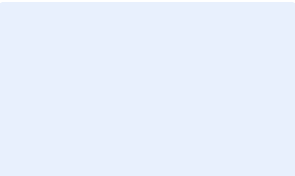
1.3. CS2: Worker Contributing Scenario: Large surfaces - Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 137.71 mg/m ³	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. 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)		
<i>Product (article) characteristics</i>			
Physical form of product: Liquid			
Concentration of substance in product: Covers percentage substance in the product up to 100 %.			
<i>Amount used, frequency and duration of use (or from service life)</i>			
Amounts used: Application rate = 4000 t(tonnes)/year			
<i>Conditions and measures related to sewage treatment plant</i>			
STP type: Municipal Sewage Treatment Plant Water - minimum efficiency of: = 89.1 %			
<i>Other conditions affecting environmental exposure</i>			
Local marine water dilution factor: 100 Local freshwater dilution factor: 10 Receiving surface water flow: 18000 m ³ /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)		
<i>Product (article) characteristics</i>			
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/m ³	ECETOC TRA worker v3	= 0.504

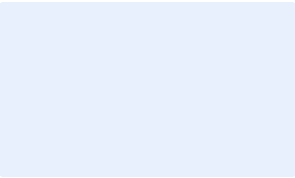
1.3. CS3: Worker Contributing Scenario: Equipment cleaning and maintenance - Rolling, Brushing - Material transfers (PROC8a, PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, long-term	= 290.4 mg/m ³	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

Table of contents

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

1. ES 1		Widespread use by professional workers; Various products (PC9a, PC1)
1.1 TITLE SECTION		
Exposure Scenario name	Professional application of coatings and inks	
Date - Version	29/07/2021 - 1.0	
Life Cycle Stage	Widespread use by professional workers	
Main user group	Professional uses	
Sector(s) of use	Professional uses (SU22)	
Product Categories	Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1)	
Environment Contributing Scenario		
CS1	ERC8a - ERC8d	
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)
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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.