Safety Data Sheet
Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878
AQUASTOP EXTREME (A)
Date of first edition: 2/23/2022
Safety Data Sheet dated 2/23/2022
version 1

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

1.1. Product identifier

Mixture identification:

Trade name: AQUASTOP EXTREME (A)

Trade code: 001007050 1

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

Recommended use: Waterproofing agent

Uses advised against: Data 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)

Skin Irrit. 2	Causes skin irritation.
Eye Irrit. 2	Causes serious eye irritation.
Skin Sens. 1A	May cause an allergic skin reaction.
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

Warning

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
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.
P501	Dispose of contents/container in accordance with applicable regulations.

Contains

Cashew, nutshell liq.

bis-[4-(2,3-epoxipropoxi)phenyl]propane

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether

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: AQUASTOP EXTREME (A)

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

Qty	Name	Ident. Numb.	Classification	Registration Number
10-19,9 %	bis-[4-(2,3-epoxipropoxi)phenyl]propane	CAS:1675-54-3 EC:216-823-5 Index:603-073-00-2	Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411, M-Chronic:1 Specific Concentration Limits: C ≥ 5%: Eye Irrit. 2 H319 C ≥ 5%: Skin Irrit. 2 H315	01-2119456619-26
5-9,9 %	p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	CAS:3101-60-8 EC:221-453-2	Skin Sens. 1, H317; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319, M-Chronic:1	
1-2,4 %	Cashew, nutshell liq.	CAS:8007-24-7 EC:232-355-4	Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1A, H317	01-2119502450-57
< 0,5 %	Quartz	CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372	
< 0,01 %	toluene	CAS:108-88-3 EC:203-625-9 Index:601-021-00-3	Flam. Liq. 2, H225; Repr. 2, H361d; Asp. Tox. 1, H304; STOT RE 2, H373; Skin Irrit. 2, H315; STOT SE 3, H336	01-2116471310-51
< 0,0015 %	ethyl acrylate	CAS:140-88-5 EC:205-438-8 Index:607-032-00-X	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Skin Sens. 1, H317 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Specific Concentration Limits: C ≥ 5%: Skin Irrit. 2 H315 C ≥ 5%: Eye Irrit. 2 H319 C ≥ 5%: STOT SE 3 H335	01-2119459301-46

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

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:

Water.

Carbon dioxide (CO_2).

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 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.

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

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Notes
Quartz	NATIONAL	AUSTRALIA		0.100				Respirable fraction
	NATIONAL	AUSTRIA		0.150				Respirable aerosol
	NATIONAL	BELGIUM		0.100				
	NATIONAL	CANADA		0.100				Canada Ontario; Respirable aerosol
	NATIONAL	CANADA		0.100				Canada Quebec
	NATIONAL	DENMARK		0.300		0.600		Inhalable aerosol
	NATIONAL	DENMARK		0.100		0.200		Respirable aerosol
	NATIONAL	FINLAND		0.050				Respirable fraction
	NATIONAL	FRANCE		0.100				Respirable aerosol
	NATIONAL	HUNGARY		0.150				Respirable aerosol
	NATIONAL	IRELAND		0.100				Respirable fraction
	NATIONAL	NEW ZEALAND		0.200				Respirable aerosol
	NATIONAL	CHINA		1.000				Inhalable fraction. 10% <= free SiO2 <= 50%.
	NATIONAL	CHINA		0.700				Inhalable fraction. 50% < free SiO2 <= 80%.
	NATIONAL	CHINA		0.500				Inhalable fraction. Free SiO2 < 80%.
	NATIONAL	SINGAPORE		0.100				Respirable aerosol.
	NATIONAL	SPAIN		0.100				Respirable fraction
	NATIONAL	SWEDEN		0.100				Respirable aerosol
	NATIONAL	SWITZERLAND		0.150				Respirable aerosol
	NATIONAL	NETHERLANDS		0.075				Respirable dust
	NATIONAL	ITALY		0.050				Silice cristallina
	NATIONAL	ITALY		0.025				A2
	NATIONAL	ITALY		10.000				Come particelle non altrimenti specificate PNOC
	NATIONAL	KOREA, REPUBLIC OF		0.050				
	NATIONAL	UNITED STATES OF AMERICA		0.050				NIOSH
	NATIONAL	ARGENTINA		0.050				

	NATIONAL	CHILE	0.080		
	NATIONAL	CROATIA	0.100		
	NATIONAL	ESTONIA	0.100		
	NATIONAL	INDIA	10.000		
	NATIONAL	LITHUANIA	0.100		
	NATIONAL	MALAYSIA	0.100		
	NATIONAL	MEXICO	0.025		Respirable fraction
	NATIONAL	NORWAY	0.300		Total dust
	NATIONAL	NORWAY	0.100		Respirable dust
	NATIONAL	PORTUGAL	0.025		Respirable fraction
	NATIONAL	SLOVENIA	0.050	0.400	
	NATIONAL	SOUTH AFRICA	0.100		
	ACGIH	NNN	0.025		(R), A2 - Pulm fibrosis, lung cancer
Limestone	NATIONAL	BELGIUM	10.000		
	NATIONAL	HUNGARY	10.000		Inhalable aerosol
	NATIONAL	CHINA	8.000		Inhalable fraction
	NATIONAL	CHINA	4.000		Inhalable aerosol
	NATIONAL	KOREA, REPUBLIC OF	10.000		
	NATIONAL	JAPAN	2.000		Respirable dust
	NATIONAL	JAPAN	8.000		Total dust: Total dust comprises particles with a flow speed of 50 to 80 cm/sec at the entry of a particle sampler
	NATIONAL	SPAIN	10.000		Inhalable aerosol
	NATIONAL	SWITZERLAND	3.000		Respirable aerosol
	NATIONAL	UNITED STATES OF AMERICA	15.000		OSHA: Total dust
	NATIONAL	UNITED STATES OF AMERICA	5.000		OSHA: Respirable dust
	NATIONAL	UNITED STATES OF AMERICA	10.000		NIOSH: total dust, calcium carbonate
	NATIONAL	UNITED STATES OF AMERICA	5.000		NIOSH: Respirable aerosol, calcium carbonate
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10.000		Inhalable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	4.000		Respirable aerosol
	NATIONAL	ITALY	10.000		Come particelle non altrimenti specificate PNOC
	NATIONAL	CROATIA	10.000		

	NATIONAL	FRANCE	10.000	
	NATIONAL	NETHERLANDS	10.000	
	NATIONAL	PORTUGAL	10.000	
bis-[4-(2,3-epoxipropoxi)phenyl] propane	NATIONAL	NETHERLANDS	5.000	respirable fraction
	NATIONAL	NETHERLANDS	10.000	Inhalable fraction
Calcium carbonate	NATIONAL	AUSTRALIA	10.000	This value is for inhalable dust containing no asbestos and <1 % crystalline silica.
	NATIONAL	CANADA	10.000	
	NATIONAL	FRANCE	10.000	inhalable aerosol
	NATIONAL	HUNGARY	10.000	inhalable aerosol
	NATIONAL	IRELAND	10.000	Inhalable fraction
	NATIONAL	IRELAND	4.000	Respirable fraction
	NATIONAL	LATVIA	6.000	
	NATIONAL	NEW ZEALAND	10.000	The value for inhalable dust containing no asbestos and less than 1% free silica.
	NATIONAL	POLAND	10.000	
	NATIONAL	SINGAPORE	10.000	(limestone, marble)
	NATIONAL	SWITZERLAND	3.000	respirable aerosol
	NATIONAL	UNITED STATES OF AMERICA	15.000	total dust
	NATIONAL	UNITED STATES OF AMERICA	5.000	respirable dust
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10.000	inhalable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	4.000	respirable aerosol
	NATIONAL	ITALY	10.000	
	NATIONAL	BELGIUM	10.000	
	NATIONAL	KOREA, REPUBLIC OF	10.000	
	NATIONAL	CROATIA	10.000	
	NATIONAL	NETHERLANDS	10.000	
	NATIONAL	PORTUGAL	10.000	
	NATIONAL	SPAIN	10.000	
	NATIONAL	CHILE	5.000	respirable fraction
Quartz	NATIONAL	AUSTRALIA	0.100	Respirable fraction
	NATIONAL	AUSTRIA	0.150	respirable aerosol
	NATIONAL	BELGIUM	0.100	

	NATIONAL	CANADA	0.100			Canada Ontario. Respirable aerosol
	NATIONAL	CANADA	0.100			Canada Quebec
	NATIONAL	DENMARK	0.300		0.600	Inhalable aerosol
	NATIONAL	DENMARK	0.100		0.200	Respirable aerosol
	NATIONAL	FINLAND	0.050			Respirable fraction
	NATIONAL	FRANCE	0.100			Respirable aerosol
	NATIONAL	HUNGARY	0.150			Respirable aerosol
	NATIONAL	IRELAND	0.100			Respirable fraction
	NATIONAL	NEW ZEALAND	0.200			Respirable aerosol
	NATIONAL	CHINA	1.000			Inhalable fraction. 10% <= free SiO2 <= 50%.
	NATIONAL	CHINA	0.700			Inhalable fraction. 50% < free SiO2 <= 80%.
	NATIONAL	CHINA	0.500			Inhalable fraction. Free SiO2 < 80%.
	NATIONAL	SINGAPORE	0.100			Respirable aerosol.
	NATIONAL	SPAIN	0.100			Respirable fraction
	NATIONAL	SWEDEN	0.100			Respirable aerosol
	NATIONAL	SWITZERLAND	0.150			Respirable aerosol
	NATIONAL	NETHERLANDS	0.075			Respirable dust
	NATIONAL	ITALY	0.050			Silice cristallina
	NATIONAL	ITALY	0.025			A2
	NATIONAL	UNITED STATES OF AMERICA	0.050			NIOSH
	NATIONAL	KOREA, REPUBLIC OF	0.050			
	NATIONAL	ARGENTINA	0.050			
	NATIONAL	CHILE	0.080			
	NATIONAL	CROATIA	0.100			
	NATIONAL	ESTONIA	0.100			
	NATIONAL	INDIA	10.000			
	NATIONAL	LITHUANIA	0.100			
	NATIONAL	MALAYSIA	0.100			
	NATIONAL	MEXICO	0.025			Respirable fraction
	NATIONAL	NORWAY	0.300			Total dust
	NATIONAL	NORWAY	0.100			Respirable dust
	NATIONAL	PORTUGAL	0.025			
	NATIONAL	SLOVENIA	0.050	0.400		
	NATIONAL	SOUTH AFRICA	0.100			
	ACGIH	NNN	0.025			(R), A2 - Pulm fibrosis, lung cancer
	EU	NNN	0.100			(R), A2 - Pulm fibrosis, lung cancer
Triiron tetraoxide	NATIONAL	POLAND	2.500		5.000	Long term and short term: respirable fraction
	NATIONAL	POLAND	5.000		10.000	Long term and short term: inhalable fraction

toluene	EU	NNN	192	50	384	100	Skin
	NATIONAL	AUSTRIA	190.000	50.000	380.000	100.000	
	NATIONAL	BELGIUM	77.000	20.000	384.000	100.000	
	NATIONAL	CANADA		20.000			Ontario
	NATIONAL	CANADA	188.000	50.000			Quebec
	NATIONAL	DENMARK	94.000	25.000	188.000	50.000	
	NATIONAL	FINLAND	81.000	25.000	380.000	100.000	
	NATIONAL	FRANCE	76.800	20.000	384.000	100.000	
	NATIONAL	GERMANY	190.000	50.000	760.000	200.000	AGS;
	NATIONAL	GERMANY	190.000	50.000	760.000	200.000	DFG
	NATIONAL	HUNGARY	190.000		380.000		
	NATIONAL	IRELAND	192.000	50.000	384.000	100.000	
	NATIONAL	ISRAEL	188.000	50.000			
	NATIONAL	ITALY	192.000	50.000			
	NATIONAL	JAPAN		20.000			MHLW
	NATIONAL	JAPAN	188.000	50.000			JSOH
	NATIONAL	LATVIA	50.000	14.000	150.000	40.000	
	NATIONAL	NEW ZEALAND	188.000	50.000			
	NATIONAL	CHINA	50.000		100.000		
	NATIONAL	POLAND	100.000		200.000		
	NATIONAL	ROMANIA	192.000	50.000	384.000	100.000	
	NATIONAL	SINGAPORE	188.000	50.000			
	NATIONAL	KOREA, REPUBLIC OF	188.000	50.000	560.000	150.000	
	NATIONAL	SPAIN	191.000	50.000	384.000	100.000	
	NATIONAL	SWEDEN	192.000	50.000	384.000	100.000	
	NATIONAL	SWITZERLAND	190.000	50.000	760.000	200.000	
	NATIONAL	NETHERLANDS	150.000		384.000		
	NATIONAL	TURKEY	192.000	50.000	384.000	100.000	
	NATIONAL	UNITED STATES OF AMERICA	375.000	100.000	560.000	150.000	NIOSH
	NATIONAL	UNITED STATES OF AMERICA	375.000	100.000	560.000	150.000	NIOSH
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	191.000	50.000	384.000	100.000	
	NATIONAL	ARGENTINA		50.000			
	NATIONAL	BULGARIA	192.000	50.000	384.000	100.000	
	NATIONAL	CZECHIA	200.000		500.000		
	NATIONAL	CHILE	328.000	87.000	560.000	160.000	
	NATIONAL	CROATIA	192.000	50.000	384.000	100.000	
	NATIONAL	ESTONIA	192.000	50.000	384.000	100.000	
	NATIONAL	GREECE	192.000	50.000	384.000	100.000	
	NATIONAL	INDONESIA		20.000			
	NATIONAL	ICELAND	94.000	25.000	188.000	50.000	
	NATIONAL	LITHUANIA	192.000	50.000	384.000	100.000	

	NATIONAL	MALAYSIA	188.000	50.000			
	NATIONAL	MEXICO		20.000			
	NATIONAL	NORWAY	94.000	25.000			
	NATIONAL	PORTUGAL		20.000			
	NATIONAL	RUSSIAN FEDERATION	50.000		150.000		
	NATIONAL	SLOVAKIA	192.000	50.000	384.000	100.000	
	NATIONAL	SLOVENIA	192.000	50.000	384.000	100.000	
	NATIONAL	SOUTH AFRICA	188.000	50.000	560.000	150.000	
	NATIONAL	SOUTH AFRICA	188.000	50.000	560.000	150.000	
	ACGIH	NNN		20			A4, BEI - Visual impair, female repro, pregnancy loss
	EU	NNN	192	50	384	100	Skin
ethyl acrylate	EU	NNN	21	5	42	10	
	NATIONAL	AUSTRIA	20.000	5.000	40.000	10.000	
	NATIONAL	BELGIUM	21.000	5.000	42.000	10.000	
	NATIONAL	CANADA		5.000		15.000	Ontario
	NATIONAL	CANADA	20.000	5.000	61.000	15.000	Québec
	NATIONAL	DENMARK	20.000	5.000	40.000	10.000	
	NATIONAL	FINLAND	21.000	5.000	42.000	10.000	
	NATIONAL	FRANCE	21.000	5.000	42.000	10.000	
	NATIONAL	GERMANY	8.300	2.000	16.600	4.000	AGS
	NATIONAL	GERMANY	8.300	2.000	16.600	4.000	DFG
	NATIONAL	HUNGARY	21.000		42.000		
	NATIONAL	IRELAND	20.000	5.000	41.000	10.000	
	NATIONAL	ITALY	21.000	5.000	42.000	10.000	
	NATIONAL	LATVIA		5.000			
	NATIONAL	NEW ZEALAND C			20.000	5.000	
	NATIONAL	POLAND	20.000		40.000		
	NATIONAL	ROMANIA	21.000	5.000	42.000	10.000	
	NATIONAL	SINGAPORE	20.000	5.000	61.000	15.000	
	NATIONAL	KOREA, REPUBLIC OF	20.000	5.000			
	NATIONAL	SPAIN	21.000	5.000	62.000	15.000	
	NATIONAL	SWITZERLAND	10.000	2.500	42.000	10.000	
	NATIONAL	NETHERLANDS	21.000		42.000		
	NATIONAL	TURKEY	21.000	5.000	42.000	10.000	
	NATIONAL	UNITED STATES OF AMERICA	100.000	25.000			OSHA
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	24.000	5.000	42.000	10.000	
	NATIONAL	ARGENTINA		5.000		15.000	
	NATIONAL	BULGARIA	25.000	5.000	42.000	10.000	

NATIONAL	CZECHIA	20.000		40.000		
NATIONAL	CROATIA	21.000	5.000	42.000	10.000	
NATIONAL	ESTONIA	21.000	5.000	42.000	10.000	
NATIONAL	GREECE	21.000	5.000	42.000	10.000	
NATIONAL	ICELAND	21.000	5.000	42.000	10.000	
NATIONAL	LITHUANIA	21.000	5.000	42.000	10.000	
NATIONAL	MALAYSIA	20.000	5.000			
NATIONAL	MEXICO		5.000		15.000	
NATIONAL	NORWAY	21.000	5.000	42.000	10.000	
NATIONAL	PORTUGAL		5.000		15.000	
NATIONAL	PORTUGAL		5.000		15.000	
NATIONAL	SLOVAKIA	21.000	5.000	42.000	10.000	
NATIONAL	SLOVENIA	21.000	5.000	42.000	10.000	
NATIONAL	SOUTH AFRICA	20.000	5.000	60.000	15.000	
NATIONAL	TAIWAN, PROVINCE OF CHINA	102.000	25.000			
ACGIH	NNN		5		15	A4 - URT, eye, and GI irr, CNS impair, skin sens
EU	NNN	21	5	42	10	

Biological limit values

CAS-No.	Component	Value	UoM	Medium	Biological Indicator	Sampling Period
108-88-3	toluene	600	µg/L	Blood	Toluene in blood	End of turn
		2	g/g	Urine	Hippuric acid in urine	End of turn; End of working week
		0,5	mg/L	Urine	o-Cresol in urine	End of turn; End of working week

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency
bis-[4-(2,3-epoxipropoxi)phenyl] propane	1675-54-3	0.006 mg/l	Freshwater	
		600.000 ng/L	Marine water	
		0.996 mg/kg	Freshwater sediments	
		0.099 mg/kg	Marine water sediments	
		0.196 mg/kg	Soil	
		10.000 mg/l	Microorganisms in sewage treatments	
		0.018 mg/l	Intermittent releases (freshwater)	
Cashew, nutshell liq.	8007-24-7	0.003 mg/l	Freshwater	
		0.088 mg/kg	Marine water sediments	
		0.970 mg/kg	Freshwater sediments	
		0.030 mg/l	Intermittent releases (freshwater)	
		6.710 mg/kg	Soil	
toluene	108-88-3	680.000 µg/l	Freshwater	
		680.000 µg/l	Intermittent releases (freshwater)	
		680.000 µg/l	Marine water	
		13.610 µg/l	Microorganisms in sewage treatments	
		16.390 mg/kg	Freshwater sediments	
		16.390 mg/kg	Marine water sediments	
		2.890 mg/kg	Soil	

ethyl acrylate	140-88-5	2.720 µg/l	Freshwater
		11.000 µg/l	Intermittent releases (freshwater)
		270.000 ng/L	Marine water
		10.000 mg/l	Microorganisms in sewage treatments
		21.300 µg/kg	Freshwater sediments
		21.300 µg/kg	Marine water sediments
		1.000 mg/kg	Soil
		10.000 mg/kg	Secondary poinsoning

Derived No Effect Level (DNEL) values

Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency
bis-[4-(2,3-epoxipropoxi)phenyl] propane	1675-54-3		0.750 mg/kg		Human Oral	Long Term, local effects
			0.750 mg/kg		Human Oral	Long Term, systemic effects
			3.571 mg/kg		Human Dermal	Long Term, systemic effects
			3.571 mg/kg		Human Dermal	Long Term, local effects
			12.250 mg/m³		Human Inhalation	Long Term, systemic effects
			12.250 mg/m³		Human Inhalation	Long Term, local effects
Cashew, nutshell liq.	8007-24-7		0.500 mg/kg	0.250 mg/kg	Human Dermal	Long Term, local effects
			0.880 mg/m³	0.200 mg/m³	Human Inhalation	Long Term, local effects
				0.250 mg/kg	Human Oral	Long Term, local effects
toluene	108-88-3		192.000 mg/m³	56.500 mg/m³	Human Inhalation	Long Term, systemic effects
			384.000 mg/m³	226.000 mg/m³	Human Inhalation	Short Term, systemic effects
			192.000 mg/m³	56.500 mg/m³	Human Inhalation	Long Term, local effects
			384.000 mg/m³	226.000 mg/m³	Human Inhalation	Short Term, local effects
			384.000 mg/kg	226.000 mg/kg	Human Dermal	Long Term, systemic effects
				8.130 mg/kg	Human Oral	Long Term, systemic effects
ethyl acrylate	140-88-5		21.000 mg/m³	2.500 mg/m³	Human Inhalation	Long Term, local effects
			0.920 mg/cm²	0.920 mg/cm²	Human Dermal	Short Term, local effects

8.2. Exposure controls

Eye protection:

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

Protection for skin:

Disposable suit.

Protection for hands:

Nitrile rubber .

Respiratory protection:

N.A.

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: Grey

Odour: N.A.

Odour threshold: N.A.

pH: N.A.

Kinematic viscosity: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: 201 °C (394 °F)

Flash point: 101 °C (214 °F)

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

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.40 g/cm3 Notes da FO041

Solubility in water: Soluble

Solubility in oil: N.A.

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

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Flammability: N.A.

Volatile Organic compounds - VOCs = 0.01 % ; 0.09 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

None in particular.

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	The product is classified: Skin Sens. 1A(H317)

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

Toxicological information on main components of the mixture:

bis-[4-(2,3-epoxipropoxi)phenyl] propane	a) acute toxicity	LD50 Oral Rabbit = 19800.00000 mg/kg	
		LD50 Skin Rabbit > 20.00000 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive	epoxy resin with an avera molecular mass <= 700 d irritate skin of rabbits
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes	
	d) respiratory or skin sensitisation	Skin Sensitization Positive	Mouse
	f) carcinogenicity	Genotoxicity Negative	Mouse, oral
		Carcinogenicity Oral Rat = 15.00000 mg/kg	NOAEL
		Carcinogenicity Skin Rat = 1.00000 mg/kg	NOAEL
	g) reproductive toxicity	No Observed Effect Level Oral Rat = 750.00000 mg/kg	
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	a) acute toxicity	LD50 Oral Rat > 2000.00 mg/kg	
		LD50 Skin Rat > 2000.00 mg/kg 24h	
	c) serious eye damage/irritation	Eye Irritant Rabbit No	
	d) respiratory or skin sensitisation	Skin Sensitization Positive	Mouse
	f) carcinogenicity	Genotoxicity Rat Negative	
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 100.00 mg/kg	
Cashew, nutshell liq.	a) acute toxicity	LD50 Oral Rat = 2000.00000 mg/kg	
		LD50 Skin Rat > 2000.00000 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes	
	d) respiratory or skin sensitisation	Skin Sensitization Positive	Mouse
Quartz	a) acute toxicity	LD50 Oral > 2000.00000 mg/kg	
toluene	a) acute toxicity	LD50 Oral Rat = 5580.00 mg/kg	
		LC50 Inhalation of aerosol Rat > 20.00 mg/l 4h	
		LD50 Skin Rabbit > 5000.00 mg/kg 24h	

	b) skin corrosion/irritation	Skin Irritant Rabbit Positive 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes	
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative	
	f) carcinogenicity	Genotoxicity Rat Negative	Intraperitoneal route
	g) reproductive toxicity	No Observed Adverse Effect Level Inhalation Rat = 2261.00 mg/m3	
ethyl acrylate	a) acute toxicity	LD50 Oral Rat = 1120.00 ml/Kg	
		LC50 Inhalation Vapour Rat < 9.13 mg/l 4h	
		LD50 Skin Rat = 3049.00 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes 72h	
	d) respiratory or skin sensitisation	Skin Sensitization Positive	Mouse
	f) carcinogenicity	Genotoxicity Negative	Mouse intraperitoneal rout
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 110.00 mg/kg	

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:

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
bis-[4-(2,3-epoxipropoxi)phenyl]propane	CAS: 1675-54-3 - EINECS: 216-823-5 - INDEX: 603-073-00-2	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 2.00000 mg/L 96h
		a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 1.80000 mg/L 48h
		a) Aquatic acute toxicity : EC50 Algae Scenedesmus capricornutum = 11.00000 mg/L 72h EPA-660/3-75-009
		c) Bacteria toxicity : EC50 Sludge activated sludge = 100.00000 mg/L 3h
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	CAS: 3101-60-8 - EINECS: 221-453-2	a) Aquatic acute toxicity : LC50 Fish rainbow trout = 7.50 mg/L ,,OECD Guideline 203 (Fish, Acute Toxicity Test)
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 67.90 mg/L 48h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 9.00 mg/L 72h ,,OECD Guideline 201 (Alga, Growth Inhibition Test)
		a) Aquatic acute toxicity : EC50 Sludge activated sludge > 1000.00 mg/L 3h ,,OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test
Cashew, nutshell liq.	CAS: 8007-24-7 - EINECS: 232-355-4	a) Aquatic acute toxicity : LC50 Fish Cyprinidon variegatus = 1000.00000 mg/L 96h ,,OECD Guideline 203 (Fish, Acute Toxicity Test)
		a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 40.46000 mg/L 48h ,,EPA OPPTS 850.1010 (Aquatic Invertebrate Acute Toxicity Test,

		Freshwater Daphnids)
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 1300.00 mg/L 72h ,,OECD Guideline 201 (Alga, Growth Inhibition Test)
		a) Aquatic acute toxicity : NOEC Sludge activated sludge = 100.00000 mg/L
toluene	CAS: 108-88-3 - EINECS: 203-625-9 - INDEX: 601-021-00-3	a) Aquatic acute toxicity : LC50 Fish Coho Salmon = 5.50 mg/L 96h
		b) Aquatic chronic toxicity : NOEC Fish Coho Salmon = 1.40 mg/L - 40days
		a) Aquatic acute toxicity : LC50 freshwater invertebrates = 3.78 mg/L 48h
		b) Aquatic chronic toxicity : NOEC freshwater invertebrates = 0.74 mg/L - 7days
		a) Aquatic acute toxicity : EC50 Algae freshwater algae = 134.00 mg/L 3h
		a) Aquatic acute toxicity : NOEC Algae freshwater algae = 10.00 mg/L 72h
		c) Bacteria toxicity : EC50 microorganisms = 84.00 mg/L 24h
		d) Terrestrial toxicity : NOEC Worm Eisenia fetida = 32.50 mg/kg - 28days
ethyl acrylate	CAS: 140-88-5 - EINECS: 205-438-8 - INDEX: 607-032-00-X	a) Aquatic acute toxicity : LC50 Fish Salmo gairdneri = 4.60 mg/L 96h EPA OTS 797.1400
		a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 7.90 mg/L 48h EPA OTS 797.1300
		b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna = 0.19 mg/L EPA OTS 797.1330
		a) Aquatic acute toxicity : EC50 Algae Selenastrum capricornutum = 4.50 mg/L 72h OECD TG 201
		a) Aquatic acute toxicity : NOEC Sludge activated sludge = 100.00 mg/L

12.2. Persistence and degradability

Component	Persitence/Degradability:	Test	Value	Notes
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Non-readily biodegradable	Oxygen consumption		OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	Non-readily biodegradable	Oxygen consumption		28days
Cashew, nutshell liq.	Readily biodegradable	Oxygen consumption	83.800	%; EU Method C.4-D
toluene	Readily biodegradable			
ethyl acrylate	Readily biodegradable	Biochemical oxigen demand	100.000	

12.3. Bioaccumulative potential

Component	Bioaccumulation	Test	Value	Notes
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Bioaccumulative	BCF - Bioconcentrantion factor	31.000	
toluene	Bioaccumulative	BCF - Bioconcentrantion factor	90.000	3days
ethyl acrylate	Bioaccumulative	BCF - Bioconcentrantion factor	2.000	

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. 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 4: Irritant — skin irritation and eye damage; HP 13: Sensitising

SECTION 14: Transport information

14.1. UN number or ID number

N/A

14.2. UN proper shipping name

ADR-Shipping Name: N/A

IATA-Technical name: N/A

IMDG-Technical name: N/A

14.3. Transport hazard class(es)

ADR-Class: N/A

IATA-Class: N/A

IMDG-Class: N/A

14.4. Packing group

ADR-Packing Group: N/A

IATA-Packing group: N/A

IMDG-Packing group: N/A

14.5. Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: N/A

14.6. Special precautions for user

Road and Rail (ADR-RID) :

ADR-Label: N/A

ADR - Hazard identification number: N/A

ADR-Special Provisions: N/A

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

ADR Limited Quantities: N/A

ADR Excepted Quantities: N/A

Air (IATA) :

IATA-Passenger Aircraft: N/A

IATA-Cargo Aircraft: N/A

IATA-Label: N/A

IATA-Subsidiary hazards: N/A

IATA-Erg: N/A

IATA-Special Provisioning: N/A

Sea (IMDG) :

IMDG-Stowage Code: N/A

IMDG-Stowage Note: N/A

IMDG-Subsidiary hazards: N/A

IMDG-Special Provisioning: N/A

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

Restrictions related to the substances contained: 40, 48, 75

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

N.A.

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

No Substance Listed

German Water Hazard Class.

Class 2: hazardous for water.

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
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
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
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
3.2/2	Skin Irrit. 2	Skin irritation, Category 2

3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1A	Skin Sens. 1A	Skin Sensitisation, Category 1A
3.7/2	Repr. 2	Reproductive toxicity, Category 2
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
3.9/1	STOT RE 1	Specific target organ toxicity — repeated exposure, Category 1
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 (EC) Nr. 1272/2008	Classification procedure
3.2/2	Calculation method
3.3/2	Calculation method
3.4.2/1A	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.

Exposure Scenario

bis-[4-(2,3-epoxipropoxi)phenyl]propane

Exposure Scenario, 07/06/2021

Substance identity	
	bis-[4-(2,3-epoxipropoxi)phenyl]propane
CAS No.	1675-54-3
INDEX No.	603-073-00-2
EINECS No.	216-823-5
Registration number	01-2119456619-26

Table of contents

1. ES 1 Widespread use by professional workers; ESC2_0000001

1.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks - Etching agent - Resins (prepolymers) - Adhesion promotor
Date - Version	27/05/2021 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	ESC2_0000001
Article Category(ies)	Other articles made of stone, plaster, cement, glass or ceramic (AC4g)

Environment Contributing Scenario

CS1	ERC8c - ERC8f

Worker Contributing Scenario

CS2 Material transfers	PROC8a
CS3 Rolling, Brushing	PROC10
CS4 Roller, spreader, flow application	PROC11
CS5 Mixing operations - Manual	PROC19

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario (ERC8c, ERC8f)

Environmental release categories	Widespread use leading to inclusion into/onto article (indoor) - Widespread use leading to inclusion into/onto article (outdoor) (ERC8c, ERC8f)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure < 0,5 kPa at STP

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:

Daily amount per site = 175 kg/day

Release type: Continuous release

Emission days: 365 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

Provide onsite wastewater removal efficiency of [3] (%):

Conditions and measures related to sewage treatment plant

STP type:

Municipal Sewage Treatment Plant

STP effluent (m^3/day): 2

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

Waste treatment

Dispose of waste cans and containers according to local regulations.

Other conditions affecting environmental exposure

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

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 < 0,5 kPa at STP

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
Avoid carrying out activities involving exposure for more than 4 hours per day.

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

Personal protection
Wear chemically resistant gloves (tested to EN374) in combination with ''basic'' employee training.

Other conditions affecting worker exposure

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 < 0,5 kPa at STP

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
Avoid carrying out activities involving exposure for more than 4 hours per day.

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

Personal protection
Wear chemically resistant gloves (tested to EN374) in combination with ''basic'' employee training.

Other conditions affecting worker exposure

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 < 0,5 kPa at STP

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
Avoid carrying out activities involving exposure for more than 4 hours per day.

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

Personal protection
Wear chemically resistant gloves (tested to EN374) in combination with ''basic'' employee training.
Wear suitable face shield.
Wear an impervious suit.
Wear a respirator conforming to EN140.

Other conditions affecting worker exposure

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

1.2. CS5: Worker Contributing Scenario: Mixing operations - Manual (PROC19)

Process Categories	Manual activities involving hand contact (PROC19)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure < 0,5 kPa at STP

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
Avoid carrying out activities involving exposure for more than 1 hour per day.

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

Personal protection
Wear chemically resistant gloves (tested to EN374) in combination with ''basic'' employee training.

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 (ERC8c, ERC8f)

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	= 0.0022 mg/L	EUSES	= 0.00022
marine sediment	= 0.00127 mg/L	EUSES	= 0.0128
freshwater sediment	= 0.012 mg/L	EUSES	= 0.0369
marine water	= 2.34E-05 mg/L	EUSES	= 0.029
soil	= 0.00142 mg/kg dry weight	EUSES	= 0.00722

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

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 0.84 mg/m³	ECETOC TRA worker v2.0	0.07
dermal, systemic, long-term	= 0.2742 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.03

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

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 5E-07 mg/m³	ECETOC TRA worker v2.0	< 0.001
dermal, systemic, long-term	= 2.743 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.33

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, systemic, long-term	= 0.36 mg/m³	ECETOC TRA worker v2.0	0.03
dermal, systemic, long-term	= 2.68 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.32

1.3. CS5: Worker Contributing Scenario: Mixing operations - Manual (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 2E-07 mg/m³	ECETOC TRA worker v2.0	< 0.001
dermal, systemic, long-term	= 1.414 mg/kg bw/day	ECETOC TRA worker v3	< 0.42
combined routes, systemic, long-term	N/A	ECETOC TRA worker v3	= 0.42

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
Cashew, nutshell liq.

Exposure Scenario, 08/06/2021

Substance identity	
	Cashew, nutshell liq.
CAS No.	8007-24-7
EINECS No.	232-355-4
Registration number	01-2119502450-57

Table of contents

1. ES 1 Widespread use by professional workers; Various products (PC9b, PC9a, PC1)

1.1 TITLE SECTION

Exposure Scenario name	Dye - Professional application of coatings and inks by brush or roller - Use in rigid foams, coatings, adhesives and sealants
Date - Version	21/05/2021 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Fillers, putties, plasters, modelling clay (PC9b) - Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1)
Article Category(ies)	Stone, plaster, cement, glass and ceramic articles: Large surface area articles (AC4a) - Other articles made of stone, plaster, cement, glass or ceramic (AC4g)

Environment Contributing Scenario

CS1	ERC8c - ERC8f

Worker Contributing Scenario

CS2 Mixing operations	PROC19
CS3 Equipment cleaning and maintenance - (aqueous) - Material transfers	PROC8b
CS4 Equipment cleaning and maintenance - Large surfaces - Surfaces - Rolling, Brushing - Finishing operations - (aqueous)	PROC10

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario (ERC8c, ERC8f)

Environmental release categories	Widespread use leading to inclusion into/onto article (indoor) - Widespread use leading to inclusion into/onto article (outdoor) (ERC8c, ERC8f)

Product (article) characteristics

Physical form of product:
Liquid

Concentration of substance in product:
Covers percentage substance in the product up to 1 %.

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

Amounts used:
< 50 t(onnes)/year
< 167 kg/day

Release type: Intermittent 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: = 93.2 %

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

Waste treatment
Residues which cannot be recycled are disposed off as chemical waste

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: Mixing operations (PROC19)

Process Categories	Manual activities involving hand contact (PROC19)

Product (article) characteristics

Physical form of product:
Liquid

Concentration of substance in product:
Covers percentage substance in the product up to 1 %.

Amount used, frequency and duration of use/exposure

Amounts used:
< 50 t(onnes)/year

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Ensure operatives are trained to minimise exposures.
Avoid direct eye contact with product, also via contamination on hands.

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

Personal protection
Wear suitable gloves tested to EN374.
Wear suitable coveralls to prevent exposure to the skin.
Use eye protection according to EN 166.
Wear a respirator conforming to EN140.

Other conditions affecting worker exposure

Covers indoor and outdoor use
Professional use
Temperature: Covers use at ambient temperatures.

1.2. CS3: Worker Contributing Scenario: Equipment cleaning and maintenance - (aqueous) - Material transfers (PROC8b)

Process Categories	Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure < 0,5 kPa at STP

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
Frequency:
Avoid using product more than .... = 4 h/event

Technical and organisational conditions and measures

Technical and organisational measures
Ensure operatives are trained to minimise exposures.
Avoid direct eye contact with product, also via contamination on hands.

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

Personal protection
Wear suitable gloves tested to EN374.

Other conditions affecting worker exposure

Indoor use
Professional use
Temperature: Covers use at ambient temperatures.

1.2. CS4: Worker Contributing Scenario: Equipment cleaning and maintenance - Large surfaces - Surfaces - Rolling, Brushing - Finishing operations - (aqueous) (PROC10)

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure < 0,5 kPa at STP

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

Frequency:
Avoid using product more than .... = 4 h/event

Technical and organisational conditions and measures

Technical and organisational measures
Ensure operatives are trained to minimise exposures.
Provide extract ventilation to points where emissions occur.
Avoid direct eye contact with product, also via contamination on hands.
Use long handled brushes and rollers.

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

Personal protection
Wear suitable gloves tested to EN374.
Wear a respirator conforming to EN140.

Other conditions affecting worker exposure

Indoor use
Professional use
Temperature: Covers use at ambient temperatures.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario (ERC8c, ERC8f)

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
N/A	N/A	N/A	< 1

1.3. CS2: Worker Contributing Scenario: Mixing operations (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative	N/A	ECETOC TRA worker v2.0	< 1
dermal	N/A	ECETOC TRA worker v2.0	< 1

1.3. CS3: Worker Contributing Scenario: Equipment cleaning and maintenance - (aqueous) - Material transfers (PROC8b)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 7.75 mg/m³	ECETOC TRA worker v2.0	= 0.562

dermal, systemic, long-term	= 0.014 mg/m³	ECETOC TRA worker v2.0	= 0.004

1.3. CS4: Worker Contributing Scenario: Equipment cleaning and maintenance - Large surfaces - Surfaces - Rolling, Brushing - Finishing operations - (aqueous) (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, local, short-term	= 2.325 mg/m³	ECETOC TRA worker v2.0	= 0.168
dermal, systemic, long-term	= 0.137 mg/m³	ECETOC TRA worker v2.0	= 0.035

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.

Safety Data Sheet

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

AQUASTOP EXTREME (B)

Date of first edition: 2/23/2022

Safety Data Sheet dated 2/23/2022

version 1

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

1.1. Product identifier

Mixture identification:

Trade name: AQUASTOP EXTREME (B)

Trade code: 001007051 1

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

Recommended use: hardener

Uses advised against: Data 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)

Skin Corr. 1B	Causes severe skin burns and eye damage.
Eye Dam. 1	Causes serious eye damage.
Skin Sens. 1A	May cause an allergic skin reaction.
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

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of contents/container in accordance with applicable regulations.

Contains

Cashew, nutshell liq.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Polyoxpropylenediamine

M-phenylenebis(methylamine)

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)

Phenol, styrenated

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: AQUASTOP EXTREME (B)

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

Qty	Name	Ident. Numb.	Classification	Registration Number
25-50 %	Polyoxpropylenediamine	CAS:9046-10-0 EC:618-561-0	Skin Corr. 1C, H314; Eye Dam. 1, H318; Aquatic Chronic 3, H412	01-2119557899-12
20-24,9 %	M-phenylenebis(methylamine)	CAS:1477-55-0 EC:216-032-5	Acute Tox. 4, H302; Acute Tox. 4, H332; Aquatic Chronic 3, H412; Eye Dam. 1, H318; Skin Sens. 1, H317; Skin Corr. 1B, H314, EUH071	01-2119480150-50
10-19,9 %	Cashew, nutshell liq.	CAS:8007-24-7 EC:232-355-4	Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1A, H317	01-2119502450-57
10-19,9 %	benzyl alcohol	CAS:100-51-6 EC:202-859-9 Index:603-057-00-5	Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319	01-2119492630-38
5-9,9 %	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)	CAS:113930-69-1 EC:500-302-7	Skin Corr. 1B, H314; Skin Sens. 1, H317; Aquatic Chronic 2, H411	01-2119965162-39
5-9,9 %	3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS:2855-13-2 EC:220-666-8 Index:612-067-00-9	Skin Corr. 1B, H314; Aquatic Chronic 3, H412; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1A, H317	01-2119514687-32
1-2,4 %	Salicylic acid	CAS:69-72-7 EC:200-712-3	Acute Tox. 4, H302; Eye Dam. 1, H318; Repr. 2, H361d	01-2119486984-17
< 0,5 %	Phenol, styrenated	CAS:61788-44-1 EC:262-975-0	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 2, H411; Eye Irrit. 2, H319, M-Chronic:1	

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

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

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:

Water.

Carbon dioxide (CO_2).

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 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.

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

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Notes
M-phenylenebis (methylamine)	NATIONAL	AUSTRALIA	C			0.100		
	NATIONAL	AUSTRIA		0.100				
	NATIONAL	BELGIUM	C			0.100		
	NATIONAL	CANADA	C			0.100		Ontario
	NATIONAL	CANADA	C			0.100		Quebec
	NATIONAL	DENMARK		0.100	0.020	0.100	0.020	
	NATIONAL	FINLAND	C			0.100		
	NATIONAL	FRANCE				0.100		
	NATIONAL	NEW ZEALAND	C				0.100	
	NATIONAL	SINGAPORE				0.100		
	NATIONAL	KOREA, REPUBLIC OF	C	0.100				
	NATIONAL	SWITZERLAND		0.100				
	NATIONAL	UNITED STATES OF AMERICA	C			0.100		
	NATIONAL	ITALY	C			0.100		
	NATIONAL	ARGENTINA	C			0.100		
	NATIONAL	INDONESIA	C			0.100		
	NATIONAL	IRELAND		0.100				
	NATIONAL	ICELAND				0.100	0.020	
	NATIONAL	MEXICO	C			0.100		
	NATIONAL	NORWAY	C			0.100		
	NATIONAL	PORTUGAL		0.100		0.100		
	NATIONAL	PORTUGAL	C			0.100		
	NATIONAL	SLOVENIA		0.100				
	ACGIH	NNN	C				0.018	Skin - Eye, skin, and GI irr
benzyl alcohol	NATIONAL	FINLAND		45.000	10.000			
	NATIONAL	GERMANY		22.000	5.000	44.000	10.000	AGS; Long term and short term: inhalable fraction
	NATIONAL	GERMANY		22.000	5.000	44.000	10.000	DFG; Long term and short term: inhalable fraction
	NATIONAL	LATVIA		5.000				
	NATIONAL	SWITZERLAND		5.000	22.000			

NATIONAL	BULGARIA	5.000				
NATIONAL	CZECHIA	40.000		80.000		
NATIONAL	LITHUANIA	5.000				
NATIONAL	POLAND	240.000				
NATIONAL	RUSSIAN FEDERATION				5.000	
NATIONAL	SLOVENIA	22.000	5.000	44.000	10.000	
NATIONAL	UNITED STATES OF AMERICA		10.000			

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency
Polyoxpropylenediamine	9046-10-0	15.000 µg/l	Freshwater	
		150.000 µg/l	Intermittent releases (freshwater)	
		14.200 µg/l	Marine water	
		7.500 mg/l	Microorganisms in sewage treatments	
		132.000 µg/kg	Freshwater sediments	
		125.000 µg/kg	Marine water sediments	
		17.600 µg/kg	Soil	
		6.930 mg/kg	Secondary poinsoning	
M-phenylenebis (methylamine)	1477-55-0	94.000 µg/l	Freshwater	
		152.000 µg/l	Intermittent releases (freshwater)	
		9.400 µg/l	Marine water	
		10.000 mg/l	Microorganisms in sewage treatments	
		430.000 µg/kg	Freshwater sediments	
		43.000 µg/kg	Marine water sediments	
		45.000 µg/kg	Soil	
Cashew, nutshell liq.	8007-24-7	0.003 mg/l	Freshwater	
		0.088 mg/kg	Marine water sediments	
		0.970 mg/kg	Freshwater sediments	
		0.030 mg/l	Intermittent releases (freshwater)	
		6.710 mg/kg	Soil	
benzyl alcohol	100-51-6	1.000 mg/l	Freshwater	
		0.100 mg/l	Marine water	
		5.270 mg/kg	Freshwater sediments	
		0.527 mg/kg	Marine water sediments	
		2.300 mg/l	Intermittent releases (freshwater)	
		39.000 mg/l	Microorganisms in sewage treatments	
		0.456 mg/kg	Soil	
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	60.000 µg/l	Freshwater	
		6.000 µg/l	Marine water	
		5.784 mg/kg	Freshwater sediments	
		578.000 µg/kg	Marine water sediments	

		1.121 mg/kg	Soil (agricultural)
		0.230 mg/l	Intermittent releases (freshwater)
		3.180 mg/l	Microorganisms in sewage treatments
Salicylic acid	69-72-7	200.000 µg/l	Freshwater
		1.000 mg/l	Intermittent releases (freshwater)
		20.000 µg/l	Marine water
		162.000 mg/l	Microorganisms in sewage treatments
		1.420 mg/kg	Freshwater sediments
		142.000 µg/kg	Marine water sediments
		166.000 µg/kg	Soil
Phenol, styrenated	61788-44-1	30.000 µg/l	Freshwater
		46.000 µg/l	Intermittent releases (freshwater)
		3.000 µg/l	Marine water
		4.600 µg/l	Intermittent releases (marine water)
		36.200 mg/l	Microorganisms in sewage treatments
		1.860 mg/kg	Freshwater sediments
		186.000 µg/kg	Marine water sediments
		355.000 µg/kg	Soil

Derived No Effect Level (DNEL) values

Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency
Polyoxpropylenediamine	9046-10-0		1.360 mg/m³		Human Inhalation	Long Term, systemic effects
			2.500 mg/kg		Human Dermal	Long Term, systemic effects
M-phenylenebis (methylamine)	1477-55-0		1.200 mg/m³		Human Inhalation	Long Term, systemic effects
			200.000 µg/m³		Human Inhalation	Long Term, local effects
			330.000 µg/kg		Human Dermal	Long Term, systemic effects
Cashew, nutshell liq.	8007-24-7		0.500 mg/kg	0.250 mg/kg	Human Dermal	Long Term, local effects
			0.880 mg/m³	0.200 mg/m³	Human Inhalation	Long Term, local effects
				0.250 mg/kg	Human Oral	Long Term, local effects
benzyl alcohol	100-51-6		22.000 mg/m³	8.100 mg/m³	Human Inhalation	Long Term, systemic effects
			450.000 mg/m³	40.500 mg/m³	Human Inhalation	Short Term, systemic effects
			9.500 mg/kg	5.700 mg/kg	Human Dermal	Long Term, systemic effects
			47.000 mg/kg	28.500 mg/kg	Human Dermal	Short Term, systemic effects
				5.000 mg/kg	Human Oral	Long Term, systemic effects

			25.000 mg/kg	Human Oral	Short Term, systemic effects
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis (methylamine)	113930-69-1	493.000 µg/m³	74.000 µg/m³	Human Inhalation	Long Term, systemic effects
		6.990 mg/m³	1.500 mg/m³	Human Inhalation	Short Term, systemic effects
		140.000 µg/kg	50.000 µg/kg	Human Dermal	Long Term, systemic effects
			50.000 µg/kg	Human Oral	Long Term, systemic effects
			990.000 µg/kg	Human Oral	Short Term, systemic effects
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	20.100 mg/m³		Human Inhalation	Short Term, systemic effects
		20.100 mg/m³		Human Inhalation	Short Term, local effects
			526.000 µg/kg	Human Oral	Long Term, systemic effects
Salicylic acid	69-72-7	16.000 mg/m³	4.000 mg/m³	Human Inhalation	Long Term, systemic effects
			0.200 mg/m³	Human Inhalation	Long Term, local effects
		2.000 mg/kg	1.000 mg/kg	Human Dermal	Long Term, systemic effects
			1.000 mg/kg	Human Oral	Long Term, systemic effects
			4.000 mg/kg	Human Oral	Short Term, systemic effects
Phenol, styrenated	61788-44-1	7.400 mg/m³	1.310 mg/m³	Human Inhalation	Long Term, systemic effects
		2.100 mg/kg	750.000 µg/kg	Human Dermal	Long Term, systemic effects
			750.000 µg/kg	Human Oral	Long Term, systemic effects

8.2. Exposure controls

Eye protection:

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

Protection for skin:

Disposable suit.

Protection for hands:

Nitrile rubber .

Respiratory protection:

N.A.

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: Orange
Odour: Like: Ammonia
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: 66 °C (151 °F)
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Vapour pressure: N.A.
Relative density: 1.00 g/cm3 Notes da FO041
Solubility in water: Slightly soluble
Solubility in oil: N.A.
Partition coefficient (n-octanol/water): N.A.
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Flammability: N.A.
Volatile Organic compounds - VOCs = 22.88 % ; 228.82 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

None in particular.

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 Corr. 1B(H314)
c) serious eye damage/irritation	The product is classified: Eye Dam. 1(H318)
d) respiratory or skin sensitisation	The product is classified: Skin Sens. 1A(H317)
e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified
	Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified
	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified

		Based on available data, the classification criteria are not met	
j) aspiration hazard		Not classified	
		Based on available data, the classification criteria are not met	

Toxicological information on main components of the mixture:

Polyoxpropylenediamine	a) acute toxicity	LD50 Oral Rat = 2885.00000 mg/kg	
		LC50 Inhalation Vapour Rat > 0.74000 mg/l 8h	
		LD50 Skin Rabbit = 2980.00000 mg/kg 24h	
	b) skin corrosion/irritation	Skin Corrosive Rabbit Positive 4h	
	c) serious eye damage/irritation	Eye Corrosive Rabbit Positive	
	f) carcinogenicity	Genotoxicity Negative	Mouse oral route
	g) reproductive toxicity	No Observed Adverse Effect Level Skin Rat = 30.00000 mg/kg	
M-phenylenebis (methylamine)	a) acute toxicity	LD50 Oral Rat = 1001.00 mg/kg	
		LC50 Inhalation Mist Rat = 1.34 mg/l 4h	
		LD50 Skin Rat > 3100.00000 mg/kg	
	b) skin corrosion/irritation	Skin Irritant Rat Positive 4h	
	d) respiratory or skin sensitisation	Skin Sensitization Positive	Mouse
	f) carcinogenicity	Genotoxicity Negative	Mouse
	g) reproductive toxicity	No Observed Effect Level Oral Rat = 450.00000 mg/kg	
Cashew, nutshell liq.	a) acute toxicity	LD50 Oral Rat = 2000.00000 mg/kg	
		LD50 Skin Rat > 2000.00000 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes	
	d) respiratory or skin sensitisation	Skin Sensitization Positive	Mouse
benzyl alcohol	a) acute toxicity	LD50 Oral Rat = 1620.00 mg/kg	
		LC50 Inhalation of aerosol Rat > 4178.00000 mg/m3 4h	
		LD50 Skin Rabbit > 2000.00000 mg/kg 24h	
		LC50 Inhalation Mist Rat = 4.18 mg/l 4h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes 24h	
	d) respiratory or skin sensitisation	Skin Sensitization Negative	Mouse
	f) carcinogenicity	Genotoxicity Negative	Mouse
		Carcinogenicity Oral Rat Negative	
	g) reproductive toxicity	No Observed Adverse Effect Level Oral = 200.00000 mg/kg	Mouse
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis	b) skin corrosion/irritation	Skin Corrosive Human Positive	

(methylamine)

3-aminomethyl-3,5,5-trimethylcyclohexylamine	a) acute toxicity	LD50 Oral Rat = 1030.00000 mg/kg	
		LC50 Inhalation of aerosol Rat > 5.01000 mg/l 4h	
		LD50 Skin Rat > 2000.00000 mg/kg	
	b) skin corrosion/irritation	Skin Corrosive Rabbit Positive	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes	
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Positive	
	f) carcinogenicity	Genotoxicity Negative	Mouse, oral route
		Carcinogenicity Negative	
Salicylic acid	a) acute toxicity	LD50 Oral Rat = 891.00000 mg/kg	
		LD50 Skin Rat > 2000.00000 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative 4h	
	c) serious eye damage/irritation	Eye Corrosive Rabbit Positive	
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative	
	f) carcinogenicity	Genotoxicity Negative	Mouse oral route
		Carcinogenicity Oral Rat Negative	
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 75.00000 mg/kg	
Phenol, styrenated	a) acute toxicity	LD50 Oral Rat >= 2000.00000 mg/kg	
		LC50 Inhalation of aerosol Rat > 4.92000 mg/l 4h	
		LD50 Skin Rat > 2000.00000 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive	
	c) serious eye damage/irritation	Eye Irritant Rabbit No 24h	
	d) respiratory or skin sensitisation	Skin Sensitization Positive	Mouse
	f) carcinogenicity	Genotoxicity Negative	Mouse oral route
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 124.00000 mg/kg	

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:

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
Polyoxpropylenediamine	CAS: 9046-10-0 - EINECS: 618-561-0	a) Aquatic acute toxicity : LC50 Fish Oncorhyncus mykiss > 15.00000 mg/L 96h OECD Guideline 203

		a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 80.00000 mg/L 48h OECD Guideline 202 a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 15.00000 mg/L 72h OECD Guideline 201 a) Aquatic acute toxicity : NOEC Algae Pseudokirchneriella subcapitata = 1.40000 mg/L 72h OECD Guideline 201 a) Aquatic acute toxicity : EC50 Sludge Activated Sludge = 750.00000 mg/L 3h OECD Guideline 209 a) Aquatic acute toxicity : NOEC Sludge Activated Sludge = 310.00000 mg/L 3h OECD Guideline 209
M-phenylenebis(methylamine)	CAS: 1477-55-0 - EINECS: 216-032-5	a) Aquatic acute toxicity : LC50 Fish Oryzias latipes = 87.60000 mg/L 96h OECD 203 a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 15.20000 mg/L 48h OECD 202 b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna = 4.70000 mg/L OECD 211 - 21days a) Aquatic acute toxicity : EC50 Algae Selenastrum capricornutum = 32.10000 mg/L 72h OECD 201 a) Aquatic acute toxicity : EC50 Sludge activated sludge > 1000.00000 mg/L OECD 209
Cashew, nutshell liq.	CAS: 8007-24-7 - EINECS: 232-355-4	a) Aquatic acute toxicity : LC50 Fish Cyprinidon variegatus = 1000.00000 mg/L 96h ,,OECD Guideline 203 (Fish, Acute Toxicity Test) a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 40.46000 mg/L 48h ,,EPA OPPTS 850.1010 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids) a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 1300.00 mg/L 72h ,,OECD Guideline 201 (Alga, Growth Inhibition Test) a) Aquatic acute toxicity : NOEC Sludge activated sludge = 100.00000 mg/L
benzyl alcohol	CAS: 100-51-6 - EINECS: 202-859-9 - INDEX: 603-057-00-5	a) Aquatic acute toxicity : LC50 Fish Oryzias latipes = 460.00000 mg/L 96h OECD SIDS (2001) b) Aquatic chronic toxicity : NOEC Fish = 48.89700 mg/L ECOSAR QSAR a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 230.00000 mg/L 48h OECD SIDS (2001) b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna = 51.00000 mg/L OECD Guideline 211 a) Aquatic acute toxicity : EC50 Algae Pseudokirchnerella subcapitata = 770.00000 mg/L 72h OECD SIDS on Benzoates (2001) c) Bacteria toxicity : EC50 Nitrosomonas = 390.00000 mg/L
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)	CAS: 113930-69-1 - EINECS: 500-302-7	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 64.00000 mg/L 96h ,,OECD Guideline 203 (Fish, Acute Toxicity Test) a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna <= 1.46000 mg/L 48h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 30.00000 mg/L 72h ,,OECD Guideline 201 (Alga, Growth Inhibition Test) a) Aquatic acute toxicity : EC50 Sludge activated sludge = 888.90000 mg/L 3h ,,OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS: 2855-13-2 - EINECS: 220-666-8 - INDEX: 612-067-00-9	a) Aquatic acute toxicity : LC50 Fish Leuciscus idus = 110.00000 mg/L 96h ,,according to 84/449/EEC, C.1, 1984

		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 23.00000 mg/L 48h OECD 202
		a) Aquatic acute toxicity : EC50 Algae Scenedesmus subspicatus > 50.00 mg/L 72h
		b) Aquatic chronic toxicity : NOEC Daphnia = 3.00000 mg/L 504h
		c) Bacteria toxicity : EC10 Pseudomonas putida = 1120.00 mg/L 18h
Salicylic acid	CAS: 69-72-7 - EINECS: 200-712-3	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 1380.00000 mg/L 96h
		a) Aquatic acute toxicity : LC50 Daphnia freshwater invertebrates = 870.00000 mg/L 48h ,,Kamaya et al., 2005
		b) Aquatic chronic toxicity : NOEC Daphnia = 10.00000 mg/L OECD guideline 202 - 21days
		a) Aquatic acute toxicity : EC50 Algae Scenedesmus subspicatus > 100.00000 mg/L 72h OECD guideline 201
		c) Bacteria toxicity : EC50 Pseudomonas putida = 380.00000 mg/L
Phenol, styrenated	CAS: 61788-44-1 - EINECS: 262-975-0	a) Aquatic acute toxicity : LC50 Fish Danio rerio = 24.00000 mg/L 96h ,,OECD Guideline 203 (Fish, Acute Toxicity Test)
		b) Aquatic chronic toxicity : NOEC Fish 3.80000 mg/L - 14days
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 4.60000 mg/L 48h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
		b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna = 1.50000 mg/L - 21days
		a) Aquatic acute toxicity : EL50 Algae Chlorella vulgaris = 3.14000 72h ,,OECD Guideline 201 (Alga, Growth Inhibition Test)
		a) Aquatic acute toxicity : EC50 Sludge activated sludge = 360.00000 mg/L 3h ISO 8192 (Water quality - Test for inhibition of oxygen consumption by activated sludge for carbonaceous and ammonium oxidation)

12.2. Persistence and degradability

Component	Persitence/Degradability:	Test	Value	Notes
Polyoxpropylenediamine	Non-readily biodegradable	CO2 production	9.800	%; OECD Guideline 301B
M-phenylenebis(methylamine)	Non-readily biodegradable	Oxygen consumption		OECD 301B
Cashew, nutshell liq.	Readily biodegradable	Oxygen consumption	83.800	%; EU Method C.4-D
benzyl alcohol	Readily biodegradable	Dissolved organic carbon	96.000	%; OECD Guideline 301A
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)	Non-readily biodegradable	Oxygen consumption	0.000	EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test)
3-aminomethyl-3,5,5-trimethylcyclohexylamine	Non-readily biodegradable	Dissolved organic carbon	8.000	%; EU-method C.4-A
Salicylic acid	Readily biodegradable	Biochemical oxigen demand	88.100	%; OECD guideline 301C
Phenol, styrenated	Non-readily biodegradable			

12.3. Bioaccumulative potential

Component	Bioaccumulation	Test	Value	Notes
M-phenylenebis(methylamine)	Not bioaccumulative	BCF - Bioconcentrantion factor		OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
benzyl alcohol	Bioaccumulative	BCF - Bioconcentrantion factor	1.000	L/kg ww

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)	Bioaccumulative	BCF - Bioconcentrantion factor	4.770	L/kg ww
Phenol, styrenated	Bioaccumulative	BCF - Bioconcentrantion factor	14.430	L/kg ww

12.4. Mobility in soil

Component	Mobility in soil
3-aminomethyl-3,5,5-trimethylcyclohexylamine	Not mobile

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 8: Corrosive; HP 13: Sensitising

SECTION 14: Transport information

14.1. UN number or ID number

2735

14.2. UN proper shipping name

ADR-Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxpropylenediamine - M-phenylenebis(methylamine))

IATA-Technical name: AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxpropylenediamine - M-phenylenebis(methylamine))

IMDG-Technical name: AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxpropylenediamine - M-phenylenebis(methylamine))

14.3. Transport hazard class(es)

ADR-Class: 8

IATA-Class: 8

IMDG-Class: 8

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-A, S-B

14.6. Special precautions for user

Road and Rail (ADR-RID) :

ADR exempt: No

ADR-Label: 8

ADR - Hazard identification number: 80

ADR-Special Provisions: 274

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

ADR Limited Quantities: 1 L

ADR Excepted Quantities: E2

Air (IATA) :

IATA-Passenger Aircraft: 851

IATA-Cargo Aircraft: 855

IATA-Label: 8

IATA-Subsidiary hazards: -

IATA-Erg: 8L

IATA-Special Provisioning: A3 A803

Sea (IMDG) :

IMDG-Stowage Code: Category A

IMDG-Stowage Note: SG35 SGG18

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 274

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

Restrictions related to the substances contained: 75

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

N.A.

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

No Substance Listed

German Water Hazard Class.

Class 2: hazardous for water.

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
EUH071	Corrosive to the respiratory tract.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H361d	Suspected of damaging the unborn child.
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
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/1C	Skin Corr. 1C	Skin corrosion, Category 1C
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1A	Skin Sens. 1A	Skin Sensitisation, Category 1A
3.7/2	Repr. 2	Reproductive toxicity, 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 (EC) Nr. 1272/2008	Classification procedure
3.2/1B	Calculation method
3.3/1	Calculation method
3.4.2/1A	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.

Exposure Scenario
Benzyl alcohol

Exposure Scenario, 30/06/2021

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

Table of contents

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

1.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks - Use in rigid foams, coatings, adhesives and sealants
Date - Version	30/06/2021 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22) - Building and construction work (SU19)
Product Categories	Fillers, putties, plasters, modelling clay (PC9b) - Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1) - Non-metal surface treatment products (PC15)

Environment Contributing Scenario

CS1	ERC8a - ERC8d

Worker Contributing Scenario

CS2	PROC8a - 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, vapour pressure < 10 Pa (Standard Temperature and Pressure)

Vapour pressure:
= 7 Pa

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

Amounts used:
Annual site tonnage = 1000 t(onnes)/year

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: = 87.36 %

STP effluent (m³/day): 2000

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

Waste treatment
Product residual disposal complies with applicable regulations.

1.2. CS2: Worker Contributing Scenario (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:

< 7 Pa

Amount used, frequency and duration of use/exposure

Duration:

Covers use up to = 8 h/day

Technical and organisational conditions and measures

Technical and organisational measures

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.
Provide a basic standard of general ventilation (1 to 3 air changes per hour).

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

Personal protection

Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: = 90 %

Other conditions affecting worker exposure

Covers indoor and outdoor use
Professional use
Temperature: Assumes use at not more than 20 °C above ambient temperature.
Body parts exposed:

Assumes that potential dermal contact is limited to hands.

1.3 Exposure estimation and reference to its source

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

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	N/A	EUSES v2.1	< 0.01
freshwater sediment	N/A	EUSES v2.1	< 0.01
marine water	N/A	EUSES v2.1	< 0.01
marine sediment	N/A	EUSES v2.1	< 0.01
soil	N/A	EUSES v2.1	= 0.019
Man via environment - Inhalation	N/A	EUSES v2.1	< 0.01
Man via environment - Oral	N/A	EUSES v2.1	< 0.01

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

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

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

Guidance to check compliance with the exposure scenario:

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

Exposure Scenario
Cashew, nutshell liq.

Exposure Scenario, 08/06/2021

Substance identity	
	Cashew, nutshell liq.
CAS No.	8007-24-7
EINECS No.	232-355-4
Registration number	01-2119502450-57

Table of contents

1. ES 1 Widespread use by professional workers; Various products (PC9b, PC9a, PC1)

1.1 TITLE SECTION

Exposure Scenario name	Dye - Professional application of coatings and inks by brush or roller - Use in rigid foams, coatings, adhesives and sealants
Date - Version	21/05/2021 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Fillers, putties, plasters, modelling clay (PC9b) - Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1)
Article Category(ies)	Stone, plaster, cement, glass and ceramic articles: Large surface area articles (AC4a) - Other articles made of stone, plaster, cement, glass or ceramic (AC4g)

Environment Contributing Scenario

CS1	ERC8c - ERC8f

Worker Contributing Scenario

CS2 Mixing operations	PROC19
CS3 Equipment cleaning and maintenance - (aqueous) - Material transfers	PROC8b
CS4 Equipment cleaning and maintenance - Large surfaces - Surfaces - Rolling, Brushing - Finishing operations - (aqueous)	PROC10

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario (ERC8c, ERC8f)

Environmental release categories	Widespread use leading to inclusion into/onto article (indoor) - Widespread use leading to inclusion into/onto article (outdoor) (ERC8c, ERC8f)

Product (article) characteristics

Physical form of product:
Liquid

Concentration of substance in product:
Covers percentage substance in the product up to 1 %.

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

Amounts used:
< 50 t(onnes)/year
< 167 kg/day

Release type: Intermittent 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: = 93.2 %

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

Waste treatment
Residues which cannot be recycled are disposed off as chemical waste

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: Mixing operations (PROC19)

Process Categories	Manual activities involving hand contact (PROC19)

Product (article) characteristics

Physical form of product:
Liquid

Concentration of substance in product:
Covers percentage substance in the product up to 1 %.

Amount used, frequency and duration of use/exposure

Amounts used:
< 50 t(onnes)/year

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Ensure operatives are trained to minimise exposures.
Avoid direct eye contact with product, also via contamination on hands.

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

Personal protection
Wear suitable gloves tested to EN374.
Wear suitable coveralls to prevent exposure to the skin.
Use eye protection according to EN 166.
Wear a respirator conforming to EN140.

Other conditions affecting worker exposure

Covers indoor and outdoor use
Professional use
Temperature: Covers use at ambient temperatures.

1.2. CS3: Worker Contributing Scenario: Equipment cleaning and maintenance - (aqueous) - Material transfers (PROC8b)

Process Categories	Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure < 0,5 kPa at STP

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
Frequency:
Avoid using product more than .... = 4 h/event

Technical and organisational conditions and measures

Technical and organisational measures
Ensure operatives are trained to minimise exposures.
Avoid direct eye contact with product, also via contamination on hands.

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

Personal protection
Wear suitable gloves tested to EN374.

Other conditions affecting worker exposure

Indoor use
Professional use
Temperature: Covers use at ambient temperatures.

1.2. CS4: Worker Contributing Scenario: Equipment cleaning and maintenance - Large surfaces - Surfaces - Rolling, Brushing - Finishing operations - (aqueous) (PROC10)

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure < 0,5 kPa at STP

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

Frequency:
Avoid using product more than .... = 4 h/event

Technical and organisational conditions and measures

Technical and organisational measures
Ensure operatives are trained to minimise exposures.
Provide extract ventilation to points where emissions occur.
Avoid direct eye contact with product, also via contamination on hands.
Use long handled brushes and rollers.

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

Personal protection
Wear suitable gloves tested to EN374.
Wear a respirator conforming to EN140.

Other conditions affecting worker exposure

Indoor use
Professional use
Temperature: Covers use at ambient temperatures.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario (ERC8c, ERC8f)

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
N/A	N/A	N/A	< 1

1.3. CS2: Worker Contributing Scenario: Mixing operations (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative	N/A	ECETOC TRA worker v2.0	< 1
dermal	N/A	ECETOC TRA worker v2.0	< 1

1.3. CS3: Worker Contributing Scenario: Equipment cleaning and maintenance - (aqueous) - Material transfers (PROC8b)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 7.75 mg/m³	ECETOC TRA worker v2.0	= 0.562

dermal, systemic, long-term	= 0.014 mg/m³	ECETOC TRA worker v2.0	= 0.004

1.3. CS4: Worker Contributing Scenario: Equipment cleaning and maintenance - Large surfaces - Surfaces - Rolling, Brushing - Finishing operations - (aqueous) (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, local, short-term	= 2.325 mg/m³	ECETOC TRA worker v2.0	= 0.168
dermal, systemic, long-term	= 0.137 mg/m³	ECETOC TRA worker v2.0	= 0.035

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
Polyoxpropylenediamine

Exposure Scenario, 17/06/2021

Substance identity	
	Polyoxpropylenediamine
CAS No.	9046-10-0
EINECS No.	618-561-0
Registration number	01-2119557899-12

Table of contents

1. ES 1 Widespread use by professional workers; Various products (PC9b, PC32)

1.1 TITLE SECTION

Exposure Scenario name	Use in coatings - Use in rigid foams, coatings, adhesives and sealants - Waterproofing agent
Date - Version	17/06/2021 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Fillers, putties, plasters, modelling clay (PC9b) - Polymer preparations and compounds (PC32)

Environment Contributing Scenario

CS1	ERC8c

Worker Contributing Scenario

CS2 Rolling, Brushing	PROC10
CS3 Mixing operations - Manual	PROC19

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario (ERC8c)

Environmental release categories	Widespread use leading to inclusion into/onto article (indoor) (ERC8c)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
= 90 Pa

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

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

Emission days: 365 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

Municipal sewage treatment plant is assumed.	Water - minimum efficiency of: = 1.5 %

Conditions and measures related to sewage treatment plant

STP type:
Municipal Sewage Treatment Plant
STP effluent (m³/day): 2000

Other conditions affecting environmental exposure

Local marine water dilution factor: 100
Local freshwater dilution factor: 10
Receiving surface water flow: 18000 m³/day
Indoor use

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

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
= 90 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 use up to = 480 min

Frequency:
Covers use up to = 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.
Avoid direct eye contact with product, also via contamination on hands.

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

Personal protection

Wear chemically resistant gloves (tested to EN374) in combination with ''basic'' employee training. Wear respiratory protection when its use is identified for certain contributing scenarios. Wear suitable respiratory protection. Wear suitable face shield.	Dermal - minimum efficiency of: = 90 %

Other conditions affecting worker exposure

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

1.2. CS3: Worker Contributing Scenario: Mixing operations - Manual (PROC19)

Process Categories	Manual activities involving hand contact (PROC19)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
= 90 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 use up to = 240 min

Frequency:
Covers use up to = 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.
Avoid direct eye contact with product, also via contamination on hands.

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

Personal protection

Wear chemically resistant gloves (tested to EN374) in combination with ''basic'' employee training. Wear respiratory protection when its use is identified for certain contributing scenarios. Wear suitable respiratory protection. Wear suitable face shield.	Dermal - minimum efficiency of: = 95 %

Other conditions affecting worker exposure

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

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 0.6857 mg/kg bw/day	ECETOC TRA worker v3	= 0.274286

1.3. CS3: Worker Contributing Scenario: Mixing operations - Manual (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 1.7697 mg/kg bw/day	ECETOC TRA worker v3	= 0.707143

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:

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Polyoxpropylenediamine

Exposure Scenario, 17/06/2021

Substance identity	
	Polyoxpropylenediamine
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Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Fillers, putties, plasters, modelling clay (PC9b) - Polymer preparations and compounds (PC32)

Environment Contributing Scenario

CS1	ERC8c

Worker Contributing Scenario

CS2 Rolling, Brushing	PROC10
CS3 Mixing operations - Manual	PROC19

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario (ERC8c)

Environmental release categories	Widespread use leading to inclusion into/onto article (indoor) (ERC8c)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
= 90 Pa

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

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

Emission days: 365 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

Municipal sewage treatment plant is assumed.	Water - minimum efficiency of: = 1.5 %

Conditions and measures related to sewage treatment plant

STP type:
Municipal Sewage Treatment Plant
STP effluent (m³/day): 2000

Other conditions affecting environmental exposure

Local marine water dilution factor: 100
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Receiving surface water flow: 18000 m³/day
Indoor use

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Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

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Vapour pressure:
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Amount used, frequency and duration of use/exposure

Duration:
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Frequency:
Covers use up to = 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.
Avoid direct eye contact with product, also via contamination on hands.

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

Personal protection

Wear chemically resistant gloves (tested to EN374) in combination with ''basic'' employee training. Wear respiratory protection when its use is identified for certain contributing scenarios. Wear suitable respiratory protection. Wear suitable face shield.	Dermal - minimum efficiency of: = 90 %

Other conditions affecting worker exposure

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

1.2. CS3: Worker Contributing Scenario: Mixing operations - Manual (PROC19)

Process Categories	Manual activities involving hand contact (PROC19)

Product (article) characteristics

Physical form of product:
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Professional use
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