

Safety Data Sheet

2K WHITE SB POLYESTER BASECOAT

Safety Data Sheet dated 19/10/2023 version 5



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

1.1. Product identifier

Mixture identification:

Trade name: 2K WHITE SB POLYESTER BASECOAT

Trade code: PF298A

Registration Number N/A

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

Recommended use: Paint product for professional/industrial use

Uses advised against: Uses not foreseen by the recommended uses

1.3. Details of the supplier of the safety data sheet

Company: INDUSTRIA CHIMICA ADRIATICA S.P.A.

Via S. Pertini, 52

62012 Civitanova Marche (MC) Italy

tel: +39 0733 8080

fax: +39 0733 808140

Responsible: regulatoryaffairs@icaspa.com - INDUSTRIA CHIMICA ADRIATICA S.p.A.

1.4. Emergency telephone number

Anti-poison centre - Hospital of Florence (24/24 hours)

Telephone +39 055 794 7819

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

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

Flam. Liq. 3 Flammable liquid and vapour.

Skin Irrit. 2 Causes skin irritation.

Eye Irrit. 2 Causes serious eye irritation.

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

Repr. 2 Suspected of damaging fertility or the unborn child.

STOT RE 1 Causes damage to organs through prolonged or repeated exposure.

Asp. Tox. 1 May be fatal if swallowed and enters airways.

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

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H361 Suspected of damaging fertility or the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/clothing and eye/face protection.
P301+P310	IF SWALLOWED: immediately call a POISON CENTER or doctor.
P331	Do NOT induce vomiting.
P370+P378	In case of fire, use a dry powder fire extinguisher to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.

Special Provisions:

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Contains

Styrene
Maleic anhydride
Toluene
Fatty acids, C14-18 and C16-18 unsaturated, maleate May produce an allergic reaction.

Dir. 2004/42/EC (VOC directive)

PVE
EU limit value for this product (cat. A/E): 400 g/l
This product contains max 400.52 g/l VOC.

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

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: 2K WHITE SB POLYESTER BASECOAT

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

Qty	Name	Ident. Numb.	Classification	Registration Number
15-25 %	Styrene	CAS:100-42-5 EC:202-851-5 Index:601-026-00-0	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Acute Tox. 4, H332; STOT SE 3, H335; Repr. 2, H361d; STOT RE 1, H372; Aquatic Chronic 3, H412	01-2119457861-32-XXXX
3-10 %	Titanium dioxide	CAS:13463-67-7 EC:236-675-5		01-2119489379-17-XXXX
3-10 %	Toluene	CAS:108-88-3 EC:203-625-9 Index:601-021-00-3	Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Repr. 2, H361d; STOT RE 2, H373; Aquatic Chronic 3, H412	01-2119471310-51-XXXX
3-10 %	N-butyl acetate	CAS:123-86-4 EC:204-658-1 Index:607-025-00-1	Flam. Liq. 3, H226; STOT SE 3, H336, EUH066	01-2119485493-29-XXXX
< 0,3%	Ethyl acetate	CAS:141-78-6 EC:205-500-4 Index:607-022-00-5	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	01-2119475103-46-XXXX
< 0,3%	Fatty acids, C14-18 and C16-18 unsaturated, maleate	CAS:85711-46-2 EC:288-306-2	Skin Irrit. 2, H315; Skin Sens. 1, H317	01-2119976378-19-XXXX

< 0,3%	Xylene, mixture of isomers	CAS:1330-20-7 EC:215-535-7 Index:601-022-00-9	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Acute Tox. 4, H332; STOT SE 3, H335; STOT RE 2, H373; Aquatic Chronic 3, H412	01-2119488216-32-XXXX
< 0,3%	Ethanol	CAS:64-17-5 EC:200-578-6 Index:603-002-00-5	Flam. Liq. 2, H225; Eye Irrit. 2, H319	01-2119457610-43-XXXX
< 0,3%	Ethylbenzene	CAS:100-41-4 EC:202-849-4 Index:601-023-00-4	Flam. Liq. 2, H225; Asp. Tox. 1, H304; Acute Tox. 4, H332; STOT RE 2, H373; Aquatic Chronic 3, H412	01-2119489370-35-XXXX
< 0,3%	Hydrocarbons, C9, aromatics	CAS:64742-95-6 EC:918-668-5	Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT SE 3, H335; STOT SE 3, H336; Aquatic Chronic 2, H411, EUH066	01-2119455851-35-XXXX
< 0,3%	Maleic anhydride	CAS:108-31-6 EC:203-571-6 Index:607-096-00-9	Acute Tox. 4, H302 STOT RE 1, H372 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1A, H317, EUH071	01-2119472428-31-XXXX
			Specific Concentration Limits: C ≥ 0,001%: Skin Sens. 1A H317	
< 0,3%	1,4-dihydroxybenzene	CAS:123-31-9 EC:204-617-8 Index:604-005-00-4	Acute Tox. 4, H302; Skin Sens. 1, H317; Eye Dam. 1, H318; Muta. 2, H341; Carc. 2, H351; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	01-2119524016-51-XXXX
< 0,3%	Di-isobutyl ketone	CAS:108-83-8 EC:203-620-1 Index:606-005-00-X	Flam. Liq. 3, H226; STOT SE 3, H335	01-2119474441-41-XXXX
< 0,3%	Butanone	CAS:78-93-3 EC:201-159-0 Index:606-002-00-3	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	01-2119457290-43-XXXX

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

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

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

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

In case of eyes contact:

Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice / attention.

In case of Ingestion:

Have the subject drink as much water as possible. Get medical advice / attention. Do not induce vomiting unless explicitly authorization by a doctor.

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:

In case of fire, use a dry powder fire extinguisher to extinguish.

For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapors and protect those trying to stem the leak.

Extinguishing media which must not be used for safety reasons:

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Excess pressure may form in containers exposed to fire at a risk of explosion.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

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

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges.

When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear.

Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Notes
Styrene CAS: 100-42-5	EU		C	85	20	170	40	
	NATIONAL	BARBADOS	C	105	25			
	NATIONAL	ANTIGUA AND BARBUDA	C	105	25	105	25	
Titanium dioxide CAS: 13463-67-7	NATIONAL	POLAND	C	50				
	NATIONAL	BHUTAN	C	10		30		
	NATIONAL	AFGHANISTAN	C	10				
	NATIONAL	ANTIGUA AND BARBUDA	C	6		12		
	NATIONAL	BARBADOS	C	5				
Toluene CAS: 108-88-3	NATIONAL	POLAND	C	10				
	EU		C	192	50	384	100	
	NATIONAL	BARBADOS	C	94	25			
	NATIONAL	ANTIGUA AND BARBUDA	C	94	25	188	50	
N-butyl acetate CAS: 123-86-4	NATIONAL	ANTARCTICA	C	192	50			
	NATIONAL	POLAND	C	100		200		
	NATIONAL	ALBANIA	C	300	62	600	124	
	NATIONAL	BELARUS	C	950		950		
	NATIONAL	BOSNIA AND HERZEGOVINA	C	720	150	960	200	
	NATIONAL	BHUTAN	C	200		950		
	NATIONAL	AZERBAIJAN	C	710	150	950	200	
	NATIONAL	ANTIGUA AND BARBUDA	C	710	150	1420	300	
	NATIONAL	BELIZE	C	715	150	950	200	
	NATIONAL	ARGENTINA	C	724	150	965	200	
	NATIONAL	AFGHANISTAN	C	723	150	964	200	
	NATIONAL	ANGUILLA	C	710	150	940	200	
	NATIONAL	ARMENIA	C	724	150	966	200	
	NATIONAL	POLAND	C	240		720		
Ethyl acetate CAS: 141-78-6	EU		C		400			
	NATIONAL	ANTIGUA AND BARBUDA	C	540	150	1080	300	
	NATIONAL	BARBADOS	C	21	5	42	10	
	NATIONAL	POLAND	C	734		1468		
Xylene, mixture of isomers CAS: 1330-20-7	EU		C	221	50	442	100	
	NATIONAL	BARBADOS	C	109	25			
	NATIONAL	ANTIGUA AND BARBUDA	C	109	25	218	50	
	NATIONAL	ANTARCTICA	C	221	50	442	100	
	NATIONAL	POLAND	C	100		200		
Ethanol CAS: 64-17-5	EU		C		1000		1000	
	NATIONAL	BARBADOS	C	950	500			
	NATIONAL	ANTIGUA AND BARBUDA	C	1900	1000	3800	2000	
	NATIONAL	ANTARCTICA	C		1000		1000	
	NATIONAL	POLAND	C	1900				
Ethylbenzene CAS: 100-41-4	EU		C	442	100	884	200	
	NATIONAL	ANTIGUA AND BARBUDA	C	217	50	434	100	
	NATIONAL	BARBADOS	C	20	5			
	NATIONAL	ANTARCTICA	C	442	100	884	200	

Hydrocarbons, C9, aromatics CAS: 64742-95-6	NATIONAL	POLAND	C	200		400		
	EU		C	100	20			
Maleic anhydride CAS: 108-31-6	NATIONAL	ALBANIA	C	0,081	0,02	0,081	0,02	
	NATIONAL	BELARUS	C	0,4		0,4		
	NATIONAL	BENIN	C	0,41	0,1	0,8	0,2	
	NATIONAL	BENIN	C	0,41	0,1	0,8	0,2	
	NATIONAL	BOSNIA AND HERZEGOVINA	C	0,41	0,1	0,81	0,2	
	NATIONAL	BAHRAIN	C	0,41	0,1	0,41	0,1	
	NATIONAL	BHUTAN	C	0,5		1		
	NATIONAL	AUSTRIA	C	0,2	0,05	0,4	0,1	
	NATIONAL	BOTSWANA	C	0,41	0,1			
	NATIONAL	AZERBAIJAN	C		0,01			
	NATIONAL	BRAZIL	C	1,2	0,3	2,5	0,6	
	NATIONAL	BONAIRE, SINT EUSTATIUS AND SABA	C	1				
	NATIONAL	BAHAMAS	C	1,2	0,3	2,5	0,6	
	NATIONAL	BARBADOS	C	0,8	0,2			
	NATIONAL	BELIZE	C	1	0,25	3	0,75	
	NATIONAL	BOUVET ISLAND	C	1	0,249	2	0,498	
	NATIONAL	ANTIGUA AND BARBUDA	C	0,4	0,1			
	NATIONAL	CANADA	C	1				
	NATIONAL	ÅLAND ISLANDS	C	1				
	ACGIH		C	0,01	0,003			
	NATIONAL	ARGENTINA	C	0,4	0,1			
	NATIONAL	ANGUILLA	C			1		
	NATIONAL	AFGHANISTAN	C	0,01	0,003			
	NATIONAL	AUSTRALIA	C	0,4	0,1	0,4	0,1	
	NATIONAL	ARMENIA	C	1		3		
	NATIONAL	POLAND	C	0,5		1		
	1,4-dihydroxybenzene CAS: 123-31-9	EU		C	2	0,44		
	Di-isobutyl ketone CAS: 108-83-8	EU		C		25		
	Butanone CAS: 78-93-3	NATIONAL	BARBADOS	C	120	20		
		NATIONAL	ANTIGUA AND BARBUDA	C	150	25	300	50
		NATIONAL	POLAND	C	150		300	
		NATIONAL	ALBANIA	C	600	200	600	200
NATIONAL		BELARUS	C	600		900		
NATIONAL		BOSNIA AND HERZEGOVINA	C			300	100	
NATIONAL		BHUTAN	C	450		900		
NATIONAL		AUSTRIA	C	150	50	300	100	
EU			C	600	200	900	300	
NATIONAL		AZERBAIJAN	C	600	200	900	300	
NATIONAL		ANTIGUA AND BARBUDA	C	145	50	290	100	
NATIONAL		BARBADOS	C	220	75			
ACGIH			C		200		300	
NATIONAL		ARGENTINA	C	600	200	900	300	
NATIONAL		ANTARCTICA	C	600	200	900	300	
NATIONAL	AFGHANISTAN	C	600	200	900	300		
NATIONAL	ANGUILLA	C	600	200	900	300		

NATIONAL	ARMENIA	C	600	200	899	300
NATIONAL	POLAND	C	450			

Predicted No Effect Concentration (PNEC) values

	PNEC LIMIT	Exposure Route	Exposure Frequency	Remark
Styrene CAS: 100-42-5	0,2 mg/kg	Soil (agricultural)		
	0,028 mg/l	Water		
	0,04 mg/l	WATER, INTERMITTING RELEASE		
	0,014 mg/l	Water		
	0,614 mg/kg	Air		
	0,307 mg/kg	Marine water sediments		
	5 mg/l	Microorganisms in sewage treatments		
Toluene CAS: 108-88-3	0,68 mg/l	Water		
	0,68 mg/l	WATER, INTERMITTING RELEASE		
	0,68 mg/l	Water		
	16,39 mg/kg	Air		
	16,39 mg/kg	Marine water sediments		
	13,61 mg/l	Microorganisms in sewage treatments		
N-butyl acetate CAS: 123-86-4	0,09 mg/kg	Soil (agricultural)		
	0,18 mg/l	Water		
	0,36 mg/l	WATER, INTERMITTING RELEASE		
	0,018 mg/l	Water		
	0,981 mg/kg	Air		
	0,098 mg/kg	Marine water sediments		
	35,6 mg/l	Microorganisms in sewage treatments		
Ethyl acetate CAS: 141-78-6	0,2 g/kg	Food chain		
	0,148 mg/kg	Soil (agricultural)		
	0,24 mg/l	Water		
	0,02 mg/l	Water		
	1,15 mg/kg	Air		
	0,115 mg/kg	Marine water sediments		
	650 mg/l	Microorganisms in sewage treatments		
Xylene, mixture of isomers CAS: 1330-20-7	2,31 mg/kg	Soil (agricultural)		
	0,32 mg/l	Water		
	0,32 mg/l	Water		
	12,46 mg/kg	Air		
	12,46 mg/kg	Marine water sediments		
	6,58 mg/l	Microorganisms in sewage treatments		
Ethanol CAS: 64-17-5	0,63 mg/kg	Soil (agricultural)		

	0,96 mg/l	Water
	0,79 mg/l	Water
	3,6 mg/kg	Air
	2,9 mg/kg	Marine water sediments
	580 mg/l	Microorganisms in sewage treatments
Ethylbenzene CAS: 100-41-4	2,68 mg/kg	Soil (agricultural)
	0,1 mg/l	Water
	0,1 mg/l	WATER, INTERMITTING RELEASE
	0,01 mg/l	Water
	13,7 mg/kg	Air
	13,7 mg/kg	Marine water sediments
	9,6 mg/l	Microorganisms in sewage treatments
1,4-dihydroxybenzene CAS: 123-31-9	129 mg/kg	Soil (agricultural)
	114 mg/l	Water
	11,4 mg/l	Water
	980 mg/kg	Air
	97 mg/kg	Marine water sediments
Butanone CAS: 78-93-3	22,5	Soil (agricultural)
	55,8 mg/l	Water
	55,8 mg/l	WATER, INTERMITTING RELEASE
	55,8 mg/l	Water
	284,74 mg/kg	Air
	287,7 mg/kg	Marine water sediments
	709 mg/l	Microorganisms in sewage treatments

Derived No Effect Level (DNEL) values

	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
Styrene CAS: 100-42-5	306 mg/m ³		182,75 mg/m ³	Human Inhalation	Short Term, local effects	
	289 mg/m ³		174,25 mg/m ³	Human Inhalation	Short Term, systemic effects	
	406 mg/kg		343 mg/kg	Human Dermal	Long Term, systemic effects	
	85 mg/m ³		10,2 mg/m ³	Human Inhalation	Long Term, systemic effects	
			2,1 mg/kg	Human Oral	Long Term, systemic effects	
Toluene CAS: 108-88-3	384 mg/m ³		226 mg/m ³	Human Inhalation	Short Term, local effects	
	384 mg/m ³		226 mg/m ³	Human Inhalation	Short Term, systemic effects	
	384 mg/kg		226 mg/kg	Human Dermal	Long Term, systemic effects	
	192 mg/m ³		56,5 mg/m ³	Human Inhalation	Long Term, local effects	

N-butyl acetate CAS: 123-86-4	192 mg/m3	56,5 mg/m3	Human Inhalation	Long Term, systemic effects	
		8,13 mg/kg	Human Oral	Long Term, systemic effects	
			Human Dermal	Short Term, local effects	
	11 mg/kg	6 mg/kg	Human Dermal	Short Term, systemic effects	
	600 mg/m3	300 mg/m3	Human Inhalation	Short Term, local effects	
	600 mg/m3	300 mg/m3	Human Inhalation	Short Term, systemic effects	
		2 mg/kg	Human Oral	Short Term, systemic effects	
			Human Dermal	Long Term, local effects	
	11 mg/kg	6 mg/kg	Human Dermal	Long Term, systemic effects	
	300 mg/m3	35,7 mg/m3	Human Inhalation	Long Term, local effects	
Ethyl acetate CAS: 141-78-6	300 mg/m3	35,7 mg/m3	Human Inhalation	Long Term, systemic effects	
		2 mg/kg	Human Oral	Long Term, systemic effects	
	1468 mg/m3	734 mg/m3	Human Inhalation	Short Term, local effects	
	1468 mg/m3	734 mg/m3	Human Inhalation	Short Term, systemic effects	
	63 mg/kg	37 mg/kg	Human Dermal	Long Term, systemic effects	
	734 mg/m3	367 mg/m3	Human Inhalation	Long Term, local effects	
	734 mg/m3	367 mg/m3	Human Inhalation	Long Term, systemic effects	
		4,5 mg/kg	Human Oral	Long Term, systemic effects	
	Xylene, mixture of isomers CAS: 1330-20-7	442 mg/m3	260	Human Inhalation	Short Term, local effects
		442	260	Human Inhalation	Short Term, systemic effects
			Human Dermal	Long Term, local effects	
212 mg/kg		125 mg/kg	Human Dermal	Long Term, systemic effects	
221		65,3	Human Inhalation	Long Term, local effects	
221 mg/m3		65,3 mg/m3	Human Inhalation	Long Term, systemic effects	
		12,5 mg/kg	Human Oral	Long Term, systemic effects	
Ethanol CAS: 64-17-5		1900 mg/m3	950 mg/m3	Human Inhalation	Short Term, local effects
	343 mg/kg	206 mg/kg	Human Dermal	Long Term, systemic effects	

	950 mg/m3	114 mg/m3	Human Inhalation	Long Term, systemic effects
	343 mg/kg	87 mg/kg	Human Oral	Long Term, systemic effects
Ethylbenzene CAS: 100-41-4	77 mg/m3	15 mg/m3	Human Inhalation	Long Term, systemic effects
	293 mg/m3		Human Inhalation	Short Term, local effects
	180 mg/kg		Human Dermal	Long Term, systemic effects
Hydrocarbons, C9, aromatics CAS: 64742-95-6	25	11 mg/kg	Human Dermal	Long Term, systemic effects
	150 mg/m3	32 mg/m3	Human Inhalation	Long Term, systemic effects
		11 mg/kg	Human Oral	Long Term, systemic effects
1,4-dihydroxybenzene CAS: 123-31-9	128 mg/kg	64 mg/kg	Human Dermal	Long Term, systemic effects
	1 mg/m3	0,5 mg/m3	Human Inhalation	Long Term, local effects
	7 mg/m3	1,74 mg/m3	Human Inhalation	Long Term, systemic effects
Butanone CAS: 78-93-3		412 mg/kg	Human Dermal	Short Term, systemic effects
	600 mg/m3	106 mg/m3	Human Inhalation	Long Term, systemic effects
		31 mg/kg	Human Oral	Long Term, systemic effects
	1161 mg/kg		Human Dermal	Long Term, systemic effects

8.2. Exposure controls

Eye protection:

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

Wear airtight protective goggles (see standard EN 166).

Protection for skin:

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344).

Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

Protection for hands:

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

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

Respiratory protection:

N.A.

Thermal Hazards:

N.A.

Environmental exposure controls:

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

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: White
Odour: Characteristic
pH: Not Relevant
Kinematic viscosity: ≤ 14 mm²/sec (40 °C)
Melting point / freezing point: N.A.
Initial boiling point and boiling range: 115 °C (239 °F)
Flash point: 23°C $\leq T \leq$ 60°C
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Vapour pressure: N.A.
Relative density: 1.45 g/ml
Solubility in water: Insoluble
Solubility in oil: N.A.
Partition coefficient (n-octanol/water): N.A.
Nanoforms dispersion stability:
Auto-ignition temperature: 430.00 °C
Decomposition temperature:
Flammability: The product is classified Flam. Liq. 3 H226
VOC content (g/L) in the product (2010/75/UE) 397.01
VOC content % in the product (2010/75/UE) 27.38

Particle characteristics:

Particle size: N.A.

9.2. Other information

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

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions
There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

10.4. Conditions to avoid

Stable under normal conditions.
Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

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	The product is classified: Repr. 2(H361)
h) STOT-single exposure	Not classified
	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	The product is classified: STOT RE 1(H372)
j) aspiration hazard	The product is classified: Asp. Tox. 1(H304)

Toxicological information on main components of the mixture:

Styrene	a) acute toxicity	LD50 Oral Rat 5000 mg/kg
	b) skin corrosion/irritation	LD50 Skin Rat > 2000 mg/kg
	j) aspiration hazard	LC50 Inhalation Vapour Rat 11,8 mg/l 4h
Titanium dioxide	a) acute toxicity	LD50 Oral Rat > 10000 mg/kg
	j) aspiration hazard	LC50 Inhalation Rat > 6,8 mg/l 4h
Toluene	a) acute toxicity	LD50 Oral Rat 636 mg/kg
	j) aspiration hazard	LC50 Inhalation Vapour Rat 49 mg/l 4h
N-butyl acetate	a) acute toxicity	LD50 Oral Rat 10760 mg/kg
	b) skin corrosion/irritation	LD50 Skin Rabbit > 14112 mg/kg
	j) aspiration hazard	LC50 Inhalation Vapour Rat > 21,1 mg/l 4h
Ethyl acetate	a) acute toxicity	LD50 Oral Rat 4934 mg/kg
	b) skin corrosion/irritation	LD50 Skin Rabbit > 20000 mg/kg
	j) aspiration hazard	LC50 Inhalation Vapour Rat > 22,5 mg/l 6h
Fatty acids, C14-18 and C16-18 unsaturated, maleate	a) acute toxicity	LD50 Oral Rat > 2000 mg/kg
Xylene, mixture of isomers	a) acute toxicity	LD50 Oral Mouse 5627 mg/kg
	b) skin corrosion/irritation	LD50 Skin Rabbit > 5000 mg/kg
	j) aspiration hazard	LC50 Inhalation Vapour Rat 6700 ppm 4h
Ethanol	a) acute toxicity	LD50 Oral Rat 10470 mg/kg
	j) aspiration hazard	LC50 Inhalation Vapour Rat 124,7 mg/l 4h
Ethylbenzene	a) acute toxicity	LD50 Oral Rat 3500 mg/kg
	b) skin corrosion/irritation	LD50 Skin Rabbit 15400 mg/kg
	j) aspiration hazard	LC50 Inhalation Vapour Rat 4000 mg/l 4h
Hydrocarbons, C9, aromatics	a) acute toxicity	LD50 Oral Rat > 8 ml/kg
	b) skin corrosion/irritation	LD50 Skin Rat > 3160 mg/kg
	j) aspiration hazard	LC50 Inhalation Vapour Rat > 6193 mg/m3 3h
Maleic anhydride	a) acute toxicity	LD50 Oral Rat 400 mg/kg
	b) skin corrosion/irritation	LD50 Skin Rat 610 mg/kg
1,4-dihydroxybenzene	a) acute toxicity	LD50 Oral Rat > 375 mg/kg
	b) skin corrosion/irritation	LD50 Skin Rat > 2000 mg/kg
Di-isobutyl ketone	a) acute toxicity	LD50 Oral Mouse 1419 mg/kg
	b) skin corrosion/irritation	LD50 Skin Rabbit 20 mg/kg

Butanone	a) acute toxicity	LD50 Oral Rat 2193 mg/kg
	b) skin corrosion/irritation	LD50 Skin Rabbit > 5000 mg/kg
	j) aspiration hazard	LC50 Inhalation Vapour Rat 4000 ppm

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

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

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
Styrene	CAS: 100-42-5 - EINECS: 202- 851-5 - INDEX: 601-026-00-0	a) Aquatic acute toxicity : EC50 Daphnia 4,7 mg/L 48h - Daphnia Magna
		b) Aquatic chronic toxicity : IC50 Algae 4,9 mg/L 72h - Algae
Toluene	CAS: 108-88-3 - EINECS: 203- 625-9 - INDEX: 601-021-00-3	a) Aquatic acute toxicity : LC50 Fish 4,02 mg/L 96h - Fish
		b) Aquatic chronic toxicity : NOEC Daphnia 1,01 mg/L - Daphnia Magna
N-butyl acetate	CAS: 123-86-4 - EINECS: 204- 658-1 - INDEX: 607-025-00-1	a) Aquatic acute toxicity : EC50 Daphnia 11,6 mg/L 48h
		b) Aquatic chronic toxicity : IC50 Algae 12,5 mg/L 72h
Ethyl acetate	CAS: 141-78-6 - EINECS: 205- 500-4 - INDEX: 607-022-00-5	a) Aquatic acute toxicity : EC50 Daphnia 44 mg/L 48h
		b) Aquatic chronic toxicity : NOEC 1 mg/L
Fatty acids, C14-18 and C16-18 unsaturated, maleate	CAS: 141-78-6 - EINECS: 205- 500-4 - INDEX: 607-022-00-5	a) Aquatic acute toxicity : EC50 Daphnia 165 mg/L 48h - Daphnia magna
		b) Aquatic chronic toxicity : NOEC Algae 397 mg/L 72h - Alga
Xylene, mixture of isomers	CAS: 1330-20-7 - EINECS: 215- 535-7 - INDEX: 601-022-00-9	a) Aquatic acute toxicity : LC50 Fish 18 mg/L 96h - Fish
		b) Aquatic chronic toxicity : NOEC Daphnia 2,4 mg/L - Daphnia pulex
Ethanol	CAS: 64-17-5 - EINECS: 200- 578-6 - INDEX: 603-002-00-5	a) Aquatic acute toxicity : EC50 Daphnia > 100 mg/L 48h - Daphnia Magna
		b) Aquatic chronic toxicity : NOEC Algae > 100 mg/L
		a) Aquatic acute toxicity : LC50 Fish 230 mg/L 96h - Fish
		b) Aquatic chronic toxicity : NOEC Fish > 1,3 mg/L
		a) Aquatic acute toxicity : EC50 Daphnia 8,5 mg/L 48h
		b) Aquatic chronic toxicity : NOEC Daphnia 2,4 mg/L - Daphnia pulex
		a) Aquatic acute toxicity : LC50 Fish 2,6 mg/L 96h - Fish
		b) Aquatic chronic toxicity : NOEC 1,57 mg/L
		a) Aquatic acute toxicity : EC50 Daphnia > 100 mg/L 48h - Daphnia Magna
		b) Aquatic chronic toxicity : NOEC Daphnia 2,4 mg/L - Daphnia pulex
		a) Aquatic acute toxicity : LC50 Fish 15,3 g/L 96h - Fish
		b) Aquatic chronic toxicity : NOEC Fish > 1,3 mg/L
		a) Aquatic acute toxicity : EC50 Daphnia 8,5 mg/L 48h
		b) Aquatic chronic toxicity : NOEC Algae 675 mg/L 96h - Alga
		a) Aquatic acute toxicity : LC50 Fish 15,3 g/L 96h - Fish
		b) Aquatic chronic toxicity : NOEC Fish > 1,3 mg/L

Ethylbenzene	CAS: 100-41-4 - EINECS: 202- 849-4 - INDEX: 601-023-00-4	a) Aquatic acute toxicity : LC50 Fish 48,5 mg/L 96h - Fish
Hydrocarbons, C9, aromatics	CAS: 64742-95- 6 - EINECS: 918-668-5	a) Aquatic acute toxicity : EC50 Daphnia 3,2 mg/L 48h - Daphnia b) Aquatic chronic toxicity : IC50 Algae 2,9 mg/L 72h - Algae
1,4-dihydroxybenzene	CAS: 123-31-9 - EINECS: 204- 617-8 - INDEX: 604-005-00-4	a) Aquatic acute toxicity : EC50 Daphnia 0,13 mg/L 48h - Daphnia b) Aquatic chronic toxicity : IC50 Algae 0,33 mg/L 72h - Algae
Butanone	CAS: 78-93-3 - EINECS: 201- 159-0 - INDEX: 606-002-00-3	a) Aquatic acute toxicity : EC50 Daphnia 308 mg/L 48h - Daphnia a) Aquatic acute toxicity : LC50 Fish 2993 mg/L 96h - Fish

12.2. Persistence and degradability

Component	Persistence/Degradability:	Value
Styrene	Readily biodegradable	0
Toluene	Readily biodegradable	0
N-butyl acetate	Readily biodegradable	0
Ethyl acetate	Readily biodegradable	0
Fatty acids, C14-18 and C16-18 unsaturated, maleate	Non-readily biodegradable	0
Xylene, mixture of isomers	Readily biodegradable	0
Ethanol	Readily biodegradable	0
Ethylbenzene	Readily biodegradable	0
1,4-dihydroxybenzene	Readily biodegradable	0
Butanone	Readily biodegradable	0

12.3. Bioaccumulative potential

Component	Test	Value
Toluene	BCF - Bioconcentration factor	8,32
N-butyl acetate		1,27
Maleic anhydride		-2,78

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

12.7. Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The product should not be allowed to enter drains, water courses or the soil. Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorized waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14: Transport information

14.1. UN number or ID number

1263

14.2. UN proper shipping name

ADR-Shipping Name: PAINT

IATA-Technical name: PAINT

IMDG-Technical name: PAINT

14.3. Transport hazard class(es)

ADR-Class: 3

IATA-Class: 3

IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5. Environmental hazards

Toxic ingredients quantity: 0.00

Very toxic ingredients quantity: 0.00

Marine pollutant: No

Environmental Pollutant: No

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR exempt:

ADR-Label: 3

ADR - Hazard identification number: 30

ADR-Special Provisions: 163 367 650

ADR-Transport category (Tunnel restriction code): 3 (D/E)

Air (IATA):

IATA-Passenger Aircraft: 355

IATA-Cargo Aircraft: 366

IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisions: A3 A72 A192

Sea (IMDG):

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 163 223 367 955

N/A

IMDG-EMS: F-E, S-E

IMDG-MFAG: 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. 2020/878

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. 2021/849 (ATP 17 CLP)
 Regulation (EU) n. 2022/692 (ATP 18 CLP)

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

Restrictions related to the product: 3, 40

Restrictions related to the substances contained: 48, 75

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

Seveso III category according to Annex 1, part 1

Product belongs to category: P5c 5000

Upper-tier threshold (tonnes)
50000

Regulation (EU) No 649/2012 (PIC regulation) - Regulation (EU) 2022/643

No substances listed

German Water Hazard Class.

Class 2: hazardous for water.

SVHC Substances:

The product does not contain any SVHC in percentage greater than 0,1%.

Dir. 2004/42/EC (VOC directive)

(ready to use)

Volatile Organic compounds - VOCs = 27.81 %

Volatile Organic compounds - VOCs = 400.52 g/L

2K WHITE SB POLYESTER BASECOAT (not ready to use)

Volatile Organic compounds - VOCs = 27.38 %

Volatile Organic compounds - VOCs = 397.01 g/L

Dir. 2010/75/EC (VOC directive)

Volatile Organic compounds - VOCs = 27.38 %

Volatile Organic compounds - VOCs = 397.01 g/L

Estimated Total Content of Water

0,00

15.2. Chemical safety assessment

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

SECTION 16: Other information

Code	Description
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH071	Corrosive to the respiratory tract.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
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.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
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.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
2.6/2	Flam. Liq. 2	Flammable liquid, Category 2
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.1/4/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
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
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
3.4.1/1	Resp. Sens. 1	Respiratory Sensitisation, Category 1
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1A	Skin Sens. 1A	Skin Sensitisation, Category 1A
3.5/2	Muta. 2	Germ cell mutagenicity, Category 2
3.6/2	Carc. 2	Carcinogenicity, Category 2
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/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
4.1/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, category 1
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
2.6/3	On basis of test data
3.2/2	Calculation method
3.3/2	Calculation method
3.4.2/1A	Calculation method
3.7/2	Calculation method
3.9/1	Calculation method
3.10/1	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: KAFH
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.

WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 14: Transport information
- SECTION 15: Regulatory information
- SECTION 16: Other information



EXPOSURE SCENARIO: ETHANOL

Exposure scenario number : 9

Attachment to safety data sheet as per Article 31 (section 7) of (EC) 1907/2006 - REACH regulation

Identified uses of the component **Ethanol**

CAS: 64-17-5, EC: 200-578-6, INDEX: 603-002-00-5 e Nr. REACH: 01-2119457610-43-XXXX

Product for industrial or professional use in the formulation of thinners, paints, additives and pastes for painting products.

Data of substance

Physical state at 20°C	Liquid
Boiling point	78,3°C (1,013 hPa)
Vapour pressure	58,5 hPa (20°C)
Biodegradation	Readily biodegradable

Company data

Annual amount per site	15050 Kg
Daily amount per site	64.04 Kg
Yearly days of use	235 days
Duration and frequency of activity	480 min 5 days per week
Average temperature of use	20 °C
Process pressure	Ambient pressure
Local exhaust ventilation	Effectiveness: 70 %
Ventilation rate per hour	7
Wear chemically resistant gloves	Effectiveness: 80 %
Use of substance	Indoor use
Concentration of the substance in the products	Covers percentage substance in the product up to 95 % (unless stated differently).

Environment factors

Emission or release factor in water	0%
Emission or release factor in soil	0%
Dimensions of receiving river	18000 m3/days

Sewage treatment plant

Type of plant	Municipal sewage treatment plant
Flow rate of sewage treatment plant	2000 m3/day
Sludge Treatment	Disposal or recovery

General exposure

Adopt good general ventilation norms, both natural by opening doors and windows, and forced ventilation using an electrically powered ventilation system.

Ensure that transfers of material are subject to restraining measures or suction ventilation.

Use suitable eye protection. In case of repeated exposure of the skin to the substance, wear protective gloves as per EN 374 norms.

1 - Short title of Exposure Scenario : Formulation & (re)packing of substances and mixtures**Main User Groups**

SU3: Industrial uses

Sector of end-use

SU10: Formulation

Process categories

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC5: Mixing or blending in batch processes

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

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

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

Environmental release categories

ERC2: Formulation into mixture

2 - Short title of exposure scenario: Use in paints and related products**Main user groups**

SU3: Industrial uses

Process Categories

PROC7: Industrial spraying

PROC10: Roller application or brushing

PROC13: Treatment of articles by dipping and pouring

Environmental Release Categories

ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

3 - Short title of exposure scenario: Use in paints and related products**Main users groups**

SU22: Professional uses

Process Categories

PROC10: Roller application or brushing

PROC11: Non industrial spraying

PROC13: Treatment of articles by dipping and pouring

PROC19: Manual activities involving hand contact

Environmental Release Categories

ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

Key

SU Sector of use category

PROC Process Categories

ERC Environmental Release Categories

Note: it is strongly advised against uses not covered in the exposure scenario

ICA S.p.A. - Regulatory affairs

Data elaboration: 10/09/2019

Version 1



EXPOSURE SCENARIO : TOLUENE

Exposure scenario number : 16

Attachment to safety data sheet as per Article 31 (section 7) of (EC) 1907/2006 - REACH regulation

Identified uses of the component **Toluene**

CAS: 108-88-3, EC: 203-625-9, INDEX: 601-021-00-3 e Nr. REACH: 01-2119471310-51-XXXX

Product for industrial or professional use in the formulation of thinners, paints, additives, hardeners and pastes for painting products.

Data of substance

Physical state at 20°C	Liquid
Boiling point	111°C at 1013 hPa
Vapour pressure	30 hPa a 20°C
Biodegradation	Readily biodegradable

Company data

Annual amount per site	230880 kg
Daily amount per site	982.47 kg
Yearly days of use	235 days
Duration and frequency of activity	480 min 5 days per week
Average temperature of use	20 °C
Process pressure	Ambient pressure
Local exhaust ventilation	Effectiveness : 70 %
Ventilation rate per hour	7
Wear chemically resistant gloves	Effectiveness : 80 %
Use of substance	Indoor use
Concentration of the substance in the products	Covers percentage substance in the product up to 99% (unless stated differently).

Environment factors

Emission or release factor in water	0%
Emission or release factor in soil	0%
Dilution factor river	10
Dilution factor coast	100

Sewage treatment plant

Type of plant	Municipal sewage treatment plant
Flow rate of sewage treatment plant	2000 m3/day
Sludge Treatment	Disposal or recovery

General exposure

Adopt good general ventilation norms, both natural by opening doors and windows, and forced ventilation using an electrically powered ventilation system.
Ensure that transfers of material are subject to restraining measures or suction ventilation.
Use suitable eye protection. In case of repeated exposure of the skin to the substance, wear protective gloves as per EN 374 norms.

1 - Short title of Exposure Scenario : Formulation & (re)packing of substances and mixtures

Main User Groups

SU3: Industrial uses

Sector of End-Use

SU10: Formulation

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions.

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition.

PROC4: Chemical production where opportunity for exposure arises.

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.

PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities.

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing).

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC2: Formulation into mixture

2 - Short title of exposure scenario: Use in paints and related products

Main User Groups

SU3: Industrial uses

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC4: Chemical production where opportunity for exposure arises

PROC7: Industrial spraying

PROC10: Roller application or brushing

PROC13: Treatment of articles by dipping and pouring

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

3 - Short title of exposure scenario: Use in paints and related products

Main User Groups

SU22: Professional uses

Process Categories

PROC10: Roller application or brushing

PROC11: Non industrial spraying

PROC13: Treatment of articles by dipping and pouring

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

Key

SU Sector of use category

PROC Process Categories

ERC Environmental Release Categories

Note: it is strongly advised against uses not covered in the exposure scenario.

ICA S.p.A. - Regulatory affairs

Data elaboration: 13/12/2019

Version 1



EXPOSURE SCENARIO: XYLENE, MIXTURE OF ISOMERS

Exposure scenario number: 18

Attachment to safety data sheet as per Article 31 (section 7) of (EC) 1907/2006 - REACH regulation

Identified uses of the component **Xylene, mixture of isomers**

CAS: 1330-20-7 , EC: 215-535-7 , INDEX: 601-022-00-9 e Nr. REACH: 01-2119488216-32-XXXX

Product for industrial or professional use in the formulation of thinners, paints, additives, hardeners and pastes for painting products.

Data of substance

Physical state at 20°C	Liquid
Boiling point	135-145°C (1.013 hPa)
Vapour pressure	6,5-6,9 hPa a 20°C
Biodegradation	Readily biodegradable

Company data

Annual amount per site	1278600 kg
Daily amount per site	5440.85 kg
Yearly days of use	235 days
Duration and frequency of activity	480 min 5 days per week
Average temperature of use	20 °C
Process pressure	Ambient pressure
Local exhaust ventilation	Effectiveness: 70 %
Ventilation rate per hour	7
Wear chemically resistant gloves	Effectiveness: 80 %
Use of substance	Indoor use
Concentration of the substance in the products	Covers percentage substance in the product up to 85 % (unless stated differently).

Environment factors

Emission or release factor in water	0%
Emission or release factor in soil	0%
Dilution factor river	10
Dilution factor coast	100

Sewage treatment plant

Type of plant	Municipal sewage treatment plant
Flow rate of sewage treatment plant	2000 m ³ /day
Sludge Treatment	Disposal or recovery

General exposure

Adopt good general ventilation norms, both natural by opening doors and windows, and forced ventilation using an electrically powered ventilation system.

Ensure that transfers of material are subject to restraining measures or suction ventilation.
Use suitable eye protection. In case of repeated exposure of the skin to the substance, wear protective gloves as per EN 374 norms.

1 - Short title of Exposure Scenario : Formulation & (re)packing of substances and mixtures

Main User Groups

SU3: Industrial uses

Sector of end-use

SU10: Formulation

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions.

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition.

PROC4: Chemical production where opportunity for exposure arises.

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.

PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities.

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing).

PROC15: Use as laboratory reagent

Environmental release categories

ERC2: Formulation into mixture

2 - Short title of exposure scenario: Use in paints and related products

Main user groups

SU3: Industrial uses

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions.

PROC4: Chemical production where opportunity for exposure arises.

PROC7: Industrial spraying.

PROC10: Roller application or brushing.

PROC13: Treatment of articles by dipping and pouring.

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

3 - Short title of exposure scenario: Use in paints and related products

Main users groups

SU22: Professional uses

Process Categories

PROC10: Roller application or brushing

PROC11: Non industrial spraying

PROC13: Treatment of articles by dipping and pouring

PROC15: Use as laboratory reagent

PROC19: Manual activities involving hand contact

Environmental Release Categories

ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

Key

SU Sector of use category

PROC Process Categories

ERC Environmental Release Categories

Note: it is strongly advised against uses not covered in the exposure scenario

ICA S.p.A. - Regulatory affairs

Data elaboration: 17/12/2019

Version 1



EXPOSURE SCENARIO : DI-ISOBUTYL KETONE

Exposure scenario number: 28

Attachment to safety data sheet as per Article 31 (section 7) of (EC) 1907/2006 - REACH regulation

Identified uses of the component **Di-isobutyl ketone**

CAS: 108-83-8 , EC: 203-620-1, INDEX: 606-005-00-X e Nr. REACH: 01-2119474441-41-XXXX

Product for industrial or professional use in the formulation of thinners, paints, additives and pastes for painting products.

Data of substance

Physical state at 20°C	Liquid
Boiling point	169°C (1013 hPa)
Vapour pressure	2.3 hPa (20°C)
Biodegradation	Readily biodegradable (Method OECD 301D)

Company data

Annual amount per site	70 Kg
Daily amount per site	0.3 Kg
Yearly days of use	235 days
Duration and frequency of activity	480 min 5 days per week
Average temperature of use	20 °C
Process pressure	Ambient pressure
Local exhaust ventilation	Effectiveness: 70 %
Ventilation rate per hour	7
Wear chemically resistant gloves	Effectiveness: 80 %
Use of substance	Indoor use
Concentration of the substance in the products	Covers percentage substance in the product up to 100 % (unless stated differently).

Environment factors

Dilution factor river	10
Dilution factor coast	100

Sewage treatment plant

Type of plant	Municipal sewage treatment plant
Flow rate of sewage treatment plant	2000 m3/day

Sludge Treatment

Disposal or recovery

General exposure

Adopt good general ventilation norms, both natural by opening doors and windows, and forced ventilation using an electrically powered ventilation system.

Ensure that transfers of material are subject to restraining measures or suction ventilation.
Use suitable eye protection. In case of repeated exposure of the skin to the substance, wear protective gloves as per EN 374 norms.

1 - Short title of Exposure Scenario: Distribution of substance

Main User Groups

SU3: Industrial uses

Process categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

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

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15: Use as laboratory reagent

Environmental release categories

ERC1: Manufacture of the substance

2 - Short title of Exposure Scenario : Formulation & (re)packing of substances and mixtures

Main user groups

SU3: Industrial uses

Sector of end-use

SU10: Formulation

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

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

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC2: Formulation into mixture

3 - Short title of exposure scenario: Use in paints and related products

Main users groups

SU3: Industrial uses

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC4: Chemical production where opportunity for exposure arises

PROC7: Industrial spraying

PROC10: Roller application or brushing

PROC13: Treatment of articles by dipping and pouring

Environmental Release Categories

ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

4 - Short title of exposure scenario: Use in paints and related products

Main user groups

SU22: Professional uses

Process Categories

PROC10: Roller application or brushing

PROC11: Non industrial spraying

PROC13: Treatment of articles by dipping and pouring

PROC15: Use as laboratory reagent

PROC19: Manual activities involving hand contact

Environmental Release Categories

ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

Key

SU Sector of use category

PROC Process Categories

ERC Environmental Release Categories

Note: it is strongly advised against uses not covered in the exposure scenario

ICA S.p.A. - Regulatory affairs

Data elaboration: 05/11/2019

Version 1



EXPOSURE SCENARIO : STYRENE

Exposure scenario number : 15

Attachment to safety data sheet as per Article 31 (section 7) of (EC) 1907/2006 - REACH regulation

Identified uses of the component **Styrene**

CAS: 100-42-5 , EC: 202-851-5 , INDEX: 601-026-00-0 e Nr. REACH: 01-2119457861-32-XXXX

Product for industrial or professional use in the formulation of thinners, paints, additives and pastes for painting products.

Data of substance

Physical state at 20°C	Liquid
Boiling point	145°C (1,013 hPa)
Vapour pressure	6.67 hPa (20°C)
Biodegradation	Readily biodegradable

Company data

Annual amount per site	188945 kg
Daily amount per site	804.02 Kg
Yearly days of use	235 days
Duration and frequency of activity	480 min 5 days per week
Average temperature of use	20 °C
Process pressure	Ambient pressure
Local exhaust ventilation	Effectiveness: 70 %
Ventilation rate per hour	7
Wear chemically resistant gloves	Effectiveness: 80 %
Use of substance	Indoor use
Concentration of the substance in the products	Covers percentage substance in the product up to 100 % (unless stated differently).

Environment factors

Emission or release factor in water	0%
Emission or release factor in soil	0%
Dilution factor river	41
Dilution factor coast	100

Sewage treatment plant

Type of plant	Municipal sewage treatment plant
Flow rate of sewage treatment plant	2000 m ³ /day
Sludge Treatment	Disposal or recovery

General exposure

Adopt good general ventilation norms, both natural by opening doors and windows, and forced ventilation using an electrically powered ventilation system.

Ensure that transfers of material are subject to restraining measures or suction ventilation.

Use suitable eye protection. In case of repeated exposure of the skin to the substance, wear protective gloves as per EN 374 norms.

1 - Short title of Exposure Scenario: Distribution of substance

Main User Groups

SU3: Industrial uses

Process categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

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

PROC15: Use as laboratory reagent

Environmental release categories

ERC1: Manufacture of the substance

2 - Short title of Exposure Scenario : Formulation & (re)packing of substances and mixtures

Main user groups

SU3: Industrial uses

Sector of end-use

SU10: Formulation

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

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

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC2: Formulation into mixture

3 - Short title of exposure scenario: Use in paints and related products

Main users groups

SU3: Industrial uses

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC4: Chemical production where opportunity for exposure arises

PROC7: Industrial spraying

PROC10: Roller application or brushing

PROC13: Treatment of articles by dipping and pouring

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC5: Use at industrial site leading to inclusion into/onto article

Key

SU Sector of use category

PROC Process Categories

ERC Environmental Release Categories

Note: it is strongly advised against uses not covered in the exposure scenario

ICA S.p.A. - Regulatory affairs

Data elaboration: 10/12/2019

Version 1



EXPOSURE SCENARIO: ETHYL ACETATE

Exposure scenario number: 2

Attachment to safety data sheet as per Article 31 (section 7) of (EC) 1907/2006 - REACH regulation

Identified uses of the component **Ethyl acetate**

CAS: 141-78-6 , EC: 205-500-4, INDEX: 607-022-00-5 e Nr. REACH: 01-2119475103-46-XXXX

Product for industrial or professional use in the formulation of thinners, paints, additives, hardeners and pastes for painting products.

Data of substance

Physical state at 20°C	Liquid
Boiling point	77°C (1.013 hPa)
Vapour pressure	98 hPa (20°C)
Biodegradation	Readily biodegradable (Method BOD)

Company data

Annual amount per site	1266901 Kg
Daily amount per site	5931.07 Kg
Yearly days of use	235 days
Duration and frequency of activity	480 min 5 days per week
Average temperature of use	20 °C
Process pressure	Ambient pressure
Local exhaust ventilation	Effectiveness: 70 %
Ventilation rate per hour	7
Wear chemically resistant gloves	Effectiveness: 80 %
Use of substance	Indoor use
Concentration of the substance in the products	Covers percentage substance in the product up to 100 % (unless stated differently).

Environment factors

Emission or release factor in water	0%
Emission or release factor in soil	0%
Dimensions of receiving river	18.000 m3/day
Dilution factor river	10
Dilution factor coast	100

Sewage treatment plant

Type of plant	Municipal sewage treatment plant
Flow rate of sewage treatment plant	2000 m ³ /day
Sludge Treatment	Disposal or recovery

General exposure

Adopt good general ventilation norms, both natural by opening doors and windows, and forced ventilation using an electrically powered ventilation system.

Ensure that transfers of material are subject to restraining measures or suction ventilation.
Use suitable eye protection. In case of repeated exposure of the skin to the substance, wear protective gloves as per EN 374 norms.

1 - Short title of Exposure Scenario: Distribution of substance

Main User Groups

SU3: Industrial uses

SU22: Professional uses

Process categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

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

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15: Use as laboratory reagent

Environmental release categories

ERC1: Manufacture of the substance

2 - Short title of Exposure Scenario : Formulation & (re)packing of substances and mixtures

Main user groups

SU3: Industrial uses

Sector of end-use

SU10: Formulation

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

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

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC2: Formulation into mixture

3 - Short title of exposure scenario: Use in paints and related products

Main users groups

SU3: Industrial uses

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC4: Chemical production where opportunity for exposure arises

PROC7: Industrial spraying

PROC10: Roller application or brushing

PROC13: Treatment of articles by dipping and pouring

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

4 - Short title of exposure scenario: Use in paints and related products

Main user groups

SU22: Professional uses

Process Categories

PROC10: Roller application or brushing

PROC11: Non industrial spraying

PROC13: Treatment of articles by dipping and pouring

PROC15: Use as laboratory reagent

PROC19: Manual activities involving hand contact

Environmental Release Categories

ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

Key

SU Sector of use category

PROC Process Categories

ERC Environmental Release Categories

Note: it is strongly advised against uses not covered in the exposure scenario

ICA S.p.A. - Regulatory affairs

Data elaboration: 19/09/2019

Version 1



EXPOSURE SCENARIO: N-BUTYL ACETATE

Exposure scenario number: 1

Attachment to safety data sheet as per Article 31 (section 7) of (EC) 1907/2006 - REACH regulation

Identified uses of the component **N-butyl acetate**

CAS: 123-86-4 , EC: 204-658-1 , INDEX: 607-025-00-1 e Nr. REACH: 01-2119485493-29-XXXX

Product for industrial or professional use in the formulation of thinners, paints, additives, hardeners and pastes for painting products.

Data of substance

Physical state at 20°C	Liquid
Boiling point	125°C a 1,013 hPa
Vapour pressure	11,6 mbar a 20°C
Biodegradation	Readily biodegradable (Method OCSE 301D)

Company data

Annual amount per site	1762195 Kg
Daily amount per site	7498.70 Kg
Yearly days of use	235 days
Duration and frequency of activity	480 min 5 days per week
Average temperature of use	20 °C
Process pressure	Ambient pressure
Local exhaust ventilation	Effectiveness: 70 %
Ventilation rate per hour	7
Wear chemically resistant gloves	Effectiveness: 80 %
Use of substance	Indoor use
Concentration of the substance in the products	Covers percentage substance in the product up to 100 % (unless stated differently).

Environment factors

Emission or release factor in water	0%
Emission or release factor in soil	0%
Dimensions of receiving river	18.000 m ³ /day
Dilution factor river	10
Dilution factor coast	100

Sewage treatment plant

Type of plant	Municipal sewage treatment plant
Flow rate of sewage treatment plant	2000 m ³ /day
Sludge Treatment	Disposal or recovery

General exposure

Adopt good general ventilation norms, both natural by opening doors and windows, and forced ventilation using an electrically powered ventilation system.

Ensure that transfers of material are subject to restraining measures or suction ventilation.

Use suitable eye protection. In case of repeated exposure of the skin to the substance, wear protective gloves as per EN 374 norms.

1 - Short title of Exposure Scenario: Distribution of substance

Main User Groups

SU3: Industrial uses

SU22: Professional uses

Process categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

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

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15: Use as laboratory reagent

Environmental release categories

ERC1: Manufacture of the substance

2 - Short title of Exposure Scenario : Formulation & (re)packing of substances and mixtures

Main user groups

SU3: Industrial uses

Sector of end-use

SU10: Formulation

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

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

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC2: Formulation into mixture

3 - Short title of exposure scenario: Use in paints and related products

Main users groups

SU3: Industrial uses

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC4: Chemical production where opportunity for exposure arises

PROC7: Industrial spraying

PROC10: Roller application or brushing

PROC13: Treatment of articles by dipping and pouring

Environmental Release Categories

ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

4 - Breve titolo dello scenario d'esposizione: Utilizzo in vernici e prodotti correlati

Main user groups

SU22: Professional uses

Process Categories

PROC10: Roller application or brushing

PROC11: Non industrial spraying

PROC13: Treatment of articles by dipping and pouring

PROC15: Use as laboratory reagent

PROC19: Manual activities involving hand contact

Environmental Release Categories

ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

Key

SU Sector of use category

PROC Process Categories

ERC Environmental Release Categories

Note: it is strongly advised against uses not covered in the exposure scenario

ICA S.p.A. - Regulatory affairs

Data elaboration: 03/09/2019

Version 1



EXPOSURE SCENARIO: BUTANONE

Exposure scenario number: 11

Attachment to safety data sheet as per Article 31 (section 7) of (EC) 1907/2006 - REACH regulation

Identified uses of the component **Butanone**

CAS: 78-93-3 , EC: 201-159-0, INDEX: 606-002-00-3 e Nr. REACH: 01-2119457290-43-XXXX

Product for industrial or professional use in the formulation of thinners, paints, additives, hardeners and pastes for painting products.

Data of substance

Physical state at 20°C	Liquid
Boiling point	80°C (1.013 hPa)
Vapour pressure	126 hPa (20°C)
Biodegradation	Readily biodegradable (Method OECD 301 D)

Company data

Annual amount per site	236670 Kg
Daily amount per site	1007.11 Kg
Yearly days of use	235 days
Duration and frequency of activity	480 min 5 days per week
Average temperature of use	20 °C
Process pressure	Ambient pressure
Local exhaust ventilation	Effectiveness: 70 %
Ventilation rate per hour	7
Wear chemically resistant gloves	Effectiveness: 80 %
Use of substance	Indoor use
Concentration of the substance in the products	Covers percentage substance in the product up to 100 % (unless stated differently).

Environment factors

Emission or release factor in water	0%
Emission or release factor in soil	0%
Dilution factor river	10
Dilution factor coast	100

Sewage treatment plant

Type of plant	Municipal sewage treatment plant
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Flow rate of sewage treatment plant	2000 m ³ /day
Sludge Treatment	Disposal or recovery

General exposure

Adopt good general ventilation norms, both natural by opening doors and windows, and forced ventilation using an electrically powered ventilation system.

Ensure that transfers of material are subject to restraining measures or suction ventilation.
Use suitable eye protection. In case of repeated exposure of the skin to the substance, wear protective gloves as per EN 374 norms.

1 - Short title of Exposure Scenario: Distribution of substance

Main User Groups

SU3: Industrial uses

SU22: Professional uses

Process categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

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

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15: Use as laboratory reagent

Environmental release categories

ERC1: Manufacture of the substance

2 - Short title of Exposure Scenario : Formulation & (re)packing of substances and mixtures

Main user groups

SU3: Industrial uses

Sector of end-use

SU10: Formulation

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

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

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC2: Formulation into mixture

3 - Short title of exposure scenario: Use in paints and related products

Main users groups

SU3: Industrial uses

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC4: Chemical production where opportunity for exposure arises

PROC7: Industrial spraying

PROC10: Roller application or brushing

PROC13: Treatment of articles by dipping and pouring

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

4 - Short title of exposure scenario: Use in paints and related products

Main user groups

SU22: Professional uses

Process Categories

PROC10: Roller application or brushing

PROC11: Non industrial spraying

PROC13: Treatment of articles by dipping and pouring

PROC15: Use as laboratory reagent

PROC19: Manual activities involving hand contact

Environmental Release Categories

ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

Key

SU Sector of use category

PROC Process Categories

ERC Environmental Release Categories

Note: it is strongly advised against uses not covered in the exposure scenario

ICA S.p.A. - Regulatory affairs

Data elaboration: 05/12/2019

Version 1

