

Printing date 08/15/2022 Version number 68

Reviewed on 08/15/2022

1 Identification

- · Product identifier
 - · Product number PD3/93
 - · Trade name: CLEAR SB BINDER
 - · Application of the substance / the mixture For professional use
- · Details of the supplier of the safety data sheet
 - · Manufacturer/Supplier:

IVM Chemicals Srl

Viale della Stazione 3 -27020 Parona (PV)Italy -Tel +39 038425441

· Information department:

Environmental Health and safety office

hseoffice@ivmchemicals.com

· Emergency telephone number:

ChemTel Expert Assistance Hotline/SDS Fax Access by dialing 1-800-255-3924 or for International +1-813-248-0585.

2 Hazard(s) identification

· Classification of the substance or mixture

Flammable Liquids 3 H226 Flammable liquid and vapor. Acute Toxicity - Dermal 4 H312 Harmful in contact with skin.

Acute Toxicity - Inhalation 4 H332 Harmful if inhaled. Skin Irrititation 2 H315 Causes skin irritation.

Eye Irritation 2A H319 Causes serious eye irritation. Carcinogenicity 2 H351 Suspected of causing cancer.

Specific Target Organ Toxicity - Single Exposure 3H336 May cause drowsiness or dizziness.

Specific Target Organ Toxicity - Repeated

Exposure 2

H373 May cause damage to the hearing organs through prolonged or repeated exposure. Route of exposure: Oral, Inhalation.

H304 May be fatal if swallowed and enters

airways.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting

effects.

· Label elements

Aspiration Hazard 1

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms







· Signal word Danger

- · Hazard-determining components of labeling:
- 2-butoxyethanol

Hydrocarbons, C10, aromatics, <1% naphthalene

xylene

ethylbenzene

· Hazard statements

H226 Flammable liquid and vapor.

H312+H332 Harmful in contact with skin or if inhaled.

(Contd. on page 2)



Printing date 08/15/2022 Version number 68 Reviewed on 08/15/2022

Product number PD3/93

Trade name: CLEAR SB BINDER

(Contd. of page 1)

	(Contd. or page 1)
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H336	May cause drowsiness or dizziness.
H373	May cause damage to the hearing organs through prolonged or repeated
	exposure. Route of exposure: Oral, Inhalation.
H304	May be fatal if swallowed and enters airways.
H412	Harmful to aquatic life with long lasting effects.
· Precaution	nary statements
D210	Keen away from heat/sparks/open flames/hot surfaces - No smoking

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P301+P310 If swallowed: Immediately call a poison center/doctor.

P321 Specific treatment (see on this label).

P331 Do NOT induce vomiting.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 2 Fire = 3Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 2 Fire = 3

 $\frac{|ACTIVITY|_0|}{ACTIVITY} = 0$

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture: consisting of the following components.

· Dangerous components:

111-76-2 2-butoxyethanol

50-74.99%

Acute Toxicity - Oral 4, H302; Acute Toxicity - Dermal 4, H312; Acute Toxicity - Inhalation 4, H332; Skin Irrititation 2, H315; Eye Irritation 2A, H319

Flammable Liquids 4, H227

(Contd. on page 3)



Printing date 08/15/2022 Version number 68 Reviewed on 08/15/2022

Product number PD3/93

Trade name: CLEAR SB BINDER

	Hydrocarbons, C10, aromatics, <1% naphthalene	20-24.99%
	 Aspiration Hazard 1, H304 Aquatic Chronic 2, H411 Specific Target Organ Toxicity - Single Exposure 3, H336 Flammable Liquids 4, H227 	
1330-20-7	xylene	12.5-15%
	 Flammable Liquids 3, H226 Specific Target Organ Toxicity - Repeated Exposure 2, H373; Aspiration Hazard 1, H304 Acute Toxicity - Dermal 4, H312; Acute Toxicity - Inhalation 4, H332; Skin Irrititation 2, H315; Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H335 Aquatic Acute 3, H402; Aquatic Chronic 3, H412 	
100-41-4	ethylbenzene	2.5-4.99%
	 Flammable Liquids 2, H225 Carcinogenicity 2, H351; Specific Target Organ Toxicity - Repeated Exposure 2, H373; Aspiration Hazard 1, H304 Acute Toxicity - Inhalation 4, H332 Aquatic Chronic 3, H412 	

4 First-aid measures

· Description of first aid measures

· General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

personal protective equipment for first aid responders is recommended. (please see section 8)

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Take off immediately all contaminated clothing, include underwear and shoes (if necessary). Rinse thoroughly with plenty of water for at least 20 minutes and take medical advise. If medical advise is needed have products container or label at hand.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist , consult a doctor.

- · After swallowing: Do not induce vomiting; immediately call for medical help.
- · Information for doctor:
 - · Most important symptoms and effects, both acute and delayed
 For symptoms and effects caused by substances, refer to Section 11.
 - · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

· Extinguishing media

· Suitable extinguishing agents:

Alcohol resistant foam

Alcohol resistant foam, CO, powder, water spray/mist.

(Contd. on page 4)



Printing date 08/15/2022

Version number 68

Reviewed on 08/15/2022

Product number PD3/93

Trade name: CLEAR SB BINDER

(Contd. of page 3)

· For safety reasons unsuitable extinguishing agents:

Do not use a jet water stream as it may scatter and spread fire.

· Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

In case of fire, the following can be released:

Nitrogen oxides (NOx)

Carbon monoxide (CO)

· Advice for firefighters

Cool by spraying with water the containers to prevent product decomposition and the development of substances potentially hazardous for health and also, in the case of closed containers exposed to flames to prevent explosions.

· Protective equipment:

Hardhat with visor, fireproof clothing, suitable gloves and if necessary respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

· Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to Section 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Protective Action Criteria for Chemicals

· PAC-1:		
111-76-2	2-butoxyethanol	60 ppm
1330-20-7	xylene	130 ppm
100-41-4	ethylbenzene	33 ppm
· PAC-2:		
111-76-2	2-butoxyethanol	120 ppm
1330-20-7	xylene	920* ppm
100-41-4	-4 ethylbenzene 1100*	
· PAC-3:		
111-76-2	2-butoxyethanol	700 ppm
1330-20-7	xylene	2500* ppm
100-41-4	ethylbenzene	1800* ppm

- US



Printing date 08/15/2022 Version number 68 Reviewed on 08/15/2022

Product number PD3/93

Trade name: CLEAR SB BINDER

(Contd. of page 4)

7 Handling and storage

· Handling:

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

Protect against electrostatic charges.

Keep respiratory protective device available.

Use explosion-proof apparatus / fittings and spark-proof tools.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

· Conditions for safe storage, including any incompatibilities

- · Storage:
 - Requirements to be met by storerooms and receptacles:

Provide solvent resistant, sealed floor.

Observe the label precautions, the expiration date for the use, if not indicated, is from delivery date of goods.

In cases where there is no reported expiration date, it means that the product must be used within 8 months.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) Those typical of the product and the instructions in the data sheet if required.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

· Control parameters

· Components with limit values that require monitoring at the workplace:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

111-76-2 2-butoxyethanol

PEL Long-term value: 240 mg/m³, 50 ppm

Skin

REL Long-term value: 24 mg/m³, 5 ppm

Skin

TLV Long-term value: 20 ppm

BEI, A3

1330-20-7 xylene

PEL Long-term value: 435 mg/m³, 100 ppm

REL Short-term value: 655 mg/m³, 150 ppm

Long-term value: 435 mg/m³, 100 ppm

TLV Short-term value: (150) ppm

Long-term value: (100) NIC-20 ppm

BEI, A4

(Contd. on page 6)



Printing date 08/15/2022 Version number 68 Reviewed on 08/15/2022

Product number PD3/93

Trade name: CLEAR SB BINDER

(Contd. of page 5)

100-41-4 ethylbenzene

PEL Long-term value: 435 mg/m³, 100 ppm
REL Short-term value: 545 mg/m³, 125 ppm
Long-term value: 435 mg/m³, 100 ppm
TLV Long-term value: 20 NIC-20 ppm

TLV Long-term value: 20 NIC-20 ppm BEI, A3, NIC: OTO, BEI, A3

· Ingredients with biological limit values:

111-76-2 2-butoxyethanol

BEI 200 mg/g creatinine

Medium: urine Time: end of shift

Parameter: Butoxyacetic acid (BAA) (with hydrolysis)

1330-20-7 xylene

BEI 1.5 g/g creatinine

Medium: urine Time: end of shift

Parameter: Methylhippuric acids

100-41-4 ethylbenzene

BEI 0.15 g/g creatinine

Medium: urine

Time: end of shift at end of workweek

Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific)

· Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls

- · Personal protective equipment:
 - General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Breathing equipment:

Short term filter device:



Suitable respiratory protective device recommended.

Filter A

· Protection of hands:



Protective gloves

Due to missing tests no recommendation to the glove material can be given for the product. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

The glove material has to be impermeable and resistant to the product.

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 7)



Printing date 08/15/2022 Version number 68 Reviewed on 08/15/2022

Product number PD3/93

Trade name: CLEAR SB BINDER

(Contd. of page 6)

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



· Viscosity:
· Dynamic:

· *Kinematic at 20 °C (68 °F):*

· Oxidising properties:

Tightly sealed goggles

nformation on basic physical and chemical properties	
· General Information	
· Appearance: · Form:	Fluid
· Form: · Color:	According to product specification
· Color: · Odor:	Characteristic
· Odor threshold:	Not determined.
· pH-value:	Mixture is non-polar/aprotic.
· Change in condition	
· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	136 °C (276.8 °F)
· Flash point:	27 °C (80.6 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	240 °C (464 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosi air/vapor mixtures are possible.
· Explosion limits:	
· Lower:	0.6 Vol %
· Upper:	10.6 Vol %
· Vapor pressure at 20 °C (68 °F):	9.5 hPa (7.1 mm Hg)
· Density (+/- 0,03) at 20 °C (68 °F):	0.923 g/cm³ (7.702 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· Water:	Not determined.

Not determined.

30 s (ISO 3 mm)

N.A.

(Contd. on page 8)



Printing date 08/15/2022 Version number 68 Reviewed on 08/15/2022

Product number PD3/93

Trade name: CLEAR SB BINDER

		(Contd. of page 7
· Solvent content: · VOC content:	88.26 % 814.6 g/l / 6.80 lb/gal	
· Solids content:	11.7 %	
· Other information (HAPS)		
1330-20-7 xylene		12.5-15%
100-41-4 ethylbenzene		2.5-4.99%
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity typical of the product as indicated in the data sheet
- · Chemical stability The product is stable in normal conditions of storage and use recommended
 - · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Possibility of hazardous reactions

Reacts with oxidizing agents.

Vapours may form explosive mixtures with air

- · Conditions to avoid No further relevant information available.
- · Incompatible materials: Acids, alkalis and oxidizing agents
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
 - · Acute toxicity:

· LD/	· LD/LC50 values that are relevant for classification:		
ATE (Acute Toxicity Estimate)			
Oral	LD50	2,302 mg/kg	
Dermal	LD50	1,687 mg/kg	
Inhalative	LC50/4 h	16.4 mg/l (mouse)	
111-76-2	2-butoxye	thanol	
Oral	LD50	1,200 mg/kg (ATE)	
		1,480 mg/kg (mouse)	
Dermal	LD50	1,100 mg/kg (rab)	
Inhalative	LC50/4 h	11 mg/l (mouse)	
Hydrocari	bons, C10	, aromatics, <1% naphthalene	
Oral	LD50	6,318 mg/kg (mouse)	
Dermal	LD50	2,001 mg/kg (rabbit)	
Inhalative	LC50/4 h	21 mg/l (mouse)	
1330-20-7	xylene		
Oral	LD50.	3,523 mg/kg (mouse)	
Dermal	LD50	1,100 mg/kg (rabbit) (ATE value)	
	LD50.	12,126 mg/kg (rabbit)	
Inhalative	LC50/4 h	11 mg/l (mouse) (ATE value)	
		(Contd. on page 9)	



Printing date 08/15/2022

Version number 68

Reviewed on 08/15/2022

Product number PD3/93

Trade name: CLEAR SB BINDER

		(Contd. of page 8)
	LC50/4h.	27.571 mg/l (mouse)
100-41-4	ethylbenze	ene
Oral	LD50	3,500 mg/kg (mouse)
Dermal	LD50	15,486 mg/kg (rabbit)
Inhalative	LC50/4 h	17.2 mg/l (mouse)

- · Primary irritant effect:
 - · on the skin: Irritant to skin and mucous membranes.
 - · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

Harmful

Irritant

Harmful in contact with skin.

Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

Suspected of causing cancer.

May cause drowsiness or dizziness.

May cause damage to the hearing organs through prolonged or repeated exposure. Route of exposure: Oral, Inhalation.

May be fatal if swallowed and enters airways.

· Carcinogenic categories

Ethylbenzene

From IARC MONOGRAPHS VOLUME 77/2000

Human carcinogenicity data

Two studies of workers potentially exposed to ethylbenzene in a production plant and a styrene polymerization plant were available. In the first study, no excess of cancer incidence was found but the description of methods was insufficient to allow proper evaluation of this finding. In the second study, no cancer mortality excess was observed during the follow-up of 15 years.

Evaluation

There is inadequate evidence in humans for the carcinogenicity of ethylbenzene. There is sufficient evidence in experimental animals for the carcinogenicity of ethylbenzene.

	<u> </u>		•		
· IARC (International Agency for Research on Cancer - Cl. 1 and 2)					
100-41-4	ethylbenzene				2B
· NTP (National Toxicology Program)					
None of the ingredients is listed.					

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

· Toxicity Harmful to aquatic life with long lasting effects.

· Aquatic toxicity:		
111-76-2 2-	butoxyethanol	
EC50	101 mg/l (daphnia) (24 h)	
LC50 (96h)	101 mg/l (Fish)	

(Contd. on page 10)



Printing date 08/15/2022 Version number 68 Reviewed on 08/15/2022

Product number PD3/93

Trade name: CLEAR SB BINDER

	(Contd. of page 9)	
Hydrocarbo	ons, C10, aromatics, <1% naphthalene	
EC50	3 mg/l (algae) (72 h)	
	10 mg/l (daphnia) (48 h)	
LC50 (96h)	5 mg/l (Fish)	
1330-20-7 x	ylene	
EC50	2.2 mg/l (algae)	
LC50 48h	1 mg/l (daphnia)	
LC50 (96h)	2.6 mg/l (Fish)	
100-41-4 et	hylbenzene	
EC50	438 mg/l (algae) (72h)	
	1.8 mg/l (daphnia) (48 h)	
LC50 (96h)	12.1 mg/l (Fish)	

Persistence and degradability No further relevant information available.

· Substances Easily biodegradable		
111-76-2	2-butoxyethanol	
	Hydrocarbons, C10, aromatics, <1% naphthalene	
1330-20-7		
100-41-4	ethylbenzene	

Behavior in environmental systems:

- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Ecotoxical effects:
 - · Remark: Harmful to fish
- · Additional ecological information:
 - · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

· Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Hand over to hazardous waste disposers.

Dispose of contents and container in accordance with local state and federal regulations.

· Uncleaned packagings:

- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

· UN-Number

· DOT, IMDG, IATA UN1263

(Contd. on page 11)



Printing date 08/15/2022 Version number 68 Reviewed on 08/15/2022

Product number PD3/93

Trade name: CLEAR SB BINDER

(Contd. of page 10)

· Note	Check viscosity and flash point at section 9
· UN proper shipping name	
$\cdot DOT$	Paint
· IMDG, IATA	PAINT

· Transport hazard class(es)

 $\cdot DOT$



· Class
· Label
· Class
· Class
· Label
3 Flammable liquids
· Label
3

· IMDG, IATA



· Class· Label3 Flammable liquids3

· Packing group · DOT, IMDG, IATA |||

· Environmental hazards:

· Marine pollutant: No

• **Special precautions for user** Warning: Flammable liquids • Hazard identification number (Kemler code): 30

• EMS Number: F-E,S-E • Stowage Category A

• Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

· IMDG

· Limited quantities (LQ)
· Excepted quantities (EQ)
5L
Code: E1

Maximum net quantity per inner packaging: 30

ml

Maximum net quantity per outer packaging:

1000 ml

· UN "Model Regulation": UN 1263 PAINT, 3, III

15 Regulatory information

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

Requirements of Federal Register

(Contd. on page 12)



Printing date 08/15/2022 Version number 68 Reviewed on 08/15/2022

Product number PD3/93

CLEAR SB BINDER Trade name:

(Contd. of page 11)

· Various regulations

· SARA

	· Section 355 (extremely hazardous substances):						
	None of the ingredients is listed.						
	· Section 313 (Specific toxic chemical listings):						
	111-76-2	2-butoxyethanol	50-74.99%				
	1330-20-7	xylene	12.5-15%				
	100-41-4	ethylbenzene	2.5-4.99%				
· TSCA (Toxic Substances Control Act):							

All components have the value ACTIVE.

· Hazardous Air Pollutants

1330-20-7 xylene

100-41-4 ethylbenzene

· Proposition 65

	Chemicals known to cause cancer:		
100-41-4	ethylbenzene	*	2.5-4.99%

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· Carc	nogenic categories					
· EPA (Environmental Protection Agency)						
111-76-2	2-butoxyethanol	NL	50-74.99%			
1330-20-7	xylene	1	12.5-15%			
100-41-4	ethylbenzene	D	2.5-4.99%			
· T.	· TLV (Threshold Limit Value)					
111-76-2 2-butoxyethanol		A3				
1330-20	1330-20-7 xylene					
100-41-	4 ethylbenzene		A3			
112945-52	5 silicon dioxide		A4			
· NIOSH-Ca (National Institute for Occupational Safety and Health)						
None of the ingredients is listed.						

[·] National regulations:

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: IVM Chemicals Srl
- · Contact: See emergency phone

(Contd. on page 13)



Printing date 08/15/2022

Version number 68

Reviewed on 08/15/2022

Product number PD3/93

CLEAR SB BINDER Trade name:

(Contd. of page 12)

· Date of preparation / last revision 08/15/2022 / 67

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit BEI: Biological Exposure Limit

Flammable Liquids 2: Flammable liquids - Category 2

Flammable Liquids 3: Flammable liquids - Category 3

Flammable Liquids 4: Flammable liquids - Category 4

Acute Toxicity - Oral 4: Acute toxicity - Category 4

Skin Irrititation 2: Skin corrosion/irritation - Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A Carcinogenicity 2: Carcinogenicity – Category 2

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) - Category 3

Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) - Category 2

Aspiration Hazard 1: Aspiration hazard - Category 1

Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard - Category 3

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

Sources

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL and following amendments

Agency ECHA web site

INRS Fiche Toxicologique

IARC International agency for research on cancer

* * Data compared to the previous version altered.