

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

STEPSBB1-89.- POLYURETHANE FLOOR ENAMEL

Version 1 Date of compilation: 26/10/2020

Page 1 of 15
Print date: 30/10/2020

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING.

1.1 Product identifier.

Product Name: 89.- ESMALTE POLIURETANO SUELOS
Product Code: STEPSBB1

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

Not available.

1.3 Details of the supplier of the safety data sheet.

Company: **PINTURAS AYELENSES, S.L.**
Address: POLÍGONO SAN JOSÉ, S/N
City: AIELO DE MALFERIT
Province: VALENCIA
Telephone: 962360292
Fax: 962360601
E-mail: info@pinturaspinay.com
Web: www.pinturaspinay.com

1.4 Emergency telephone number: 962360292 (Only available during office hours; Monday-Friday; 08:00-18:00)

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the substance or mixture.

In accordance with Regulation (EU) No 1272/2008:

Flam. Liq. 3 : Flammable liquid and vapour.

Skin Irrit. 2 : Causes skin irritation.

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

2.2 Label elements.

Labelling in accordance with Regulation (EU) No 1272/2008:

Pictograms:



Signal Word:

Warning

H statements:

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

P statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P321	Specific treatment (see ... on this label).
P370+P378	In case of fire: Use... to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to ...

EUH statements:

EUH204	Contains isocyanates. May produce an allergic reaction.
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-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

STEPSBB1-89.- POLYURETHANE FLOOR ENAMEL

Version 1 Date of compilation: 26/10/2020

Page 2 of 15
Print date: 30/10/2020

Contains:
Hexamethylene diisocyanate, oligomers

2.3 Other hazards.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Not Applicable.

3.2 Mixtures.

Substances posing a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, assigned a Community exposure limit in the workplace, and classified as PBT/vPvB or included in the Candidate List:

Identifiers	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
			Classification	specific concentration limit
Index No: 601-022-00-9 CAS No: 1330-20-7 EC No: 215-535-7 Registration No: 01-2119488216-32-XXXX	[1] xylene	10 - 25 %	Acute Tox. 4 *, H312 - Acute Tox. 4 *, H332 - Flam. Liq. 3, H226 - Skin Irrit. 2, H315	-
CAS No: 13463-67-7 EC No: 236-675-5 Registration No: 01-2119489379-17-XXXX	[1] Titanium dioxide	10 - 25 %	-	-
CAS No: 28182-81-2 EC No: 500-060-2	Hexamethylene diisocyanate, oligomers	1 - 25 %	Skin Sens. 1, H317	-
Index No: 607-195-00-7 CAS No: 108-65-6 EC No: 203-603-9 Registration No: 01-2119475791-29-XXXX	[1] 2-methoxy-1-methylethyl acetate	2.5 - 10 %	Flam. Liq. 3, H226	-
Index No: 601-023-00-4 CAS No: 100-41-4 EC No: 202-849-4 Registration No: 01-2119489370-35-XXXX	[1] ethylbenzene	1 - 10 %	Acute Tox. 4 *, H332 - Asp. Tox. 1, H304 - Flam. Liq. 2, H225 - STOT RE 2, H373(órganos de audición)	-
Index No: 606-005-00-X CAS No: 108-83-8 EC No: 203-620-1 Registration No: 01-2119474441-41-XXXX	[1] 2,6-dimethylheptan-4-one, di-isobutyl ketone	0 - 10 %	Flam. Liq. 3, H226 - STOT SE 3, H335	STOT SE 3, H335: C ≥ 10 %

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

STEPSBB1-89.- POLYURETHANE FLOOR ENAMEL

Version 1 Date of compilation: 26/10/2020

Page 3 of 15
Print date: 30/10/2020

Index No: 615-011-00-1 CAS No: 822-06-0 EC No: 212-485-8 Registration No: 01-2119457571-37-XXXX	[1] hexamethylene-di-isocyanate	0 - 0.5 %	Acute Tox. 3 *, H331 - Eye Irrit. 2, H319 - Resp. Sens. 1, H334 - Skin Irrit. 2, H315 - Skin Sens. 1, H317 - STOT SE 3, H335	Resp. Sens. 1, H334: C ≥ 0,5 % Skin Sens. 1, H317: C ≥ 0,5 %
Index No: 603-004-00-6 CAS No: 71-36-3 EC No: 200-751-6 Registration No: 01-2119484630-38-XXXX	[1] butan-1-ol	0 - 1 %	Acute Tox. 4 *, H302 - Eye Dam. 1, H318 - Flam. Liq. 3, H226 - Skin Irrit. 2, H315 - STOT SE 3, H335 - STOT SE 3, H336	-

(*) The complete text of the H phrases is given in section 16 of this Safety Data Sheet.

* See Regulation (EC) No. 1272/2008, Annex VI, section 1.2.

[1] Substance with a Community workplace exposure limit (see section 8.1).

SECTION 4: FIRST AID MEASURES.

IRRITANT MIXTURE. Its repeated or prolonged contact with the skin or mucous membranes can cause irritant symptoms such as reddening of the skin, blisters, or dermatitis. Some of the symptoms may not be immediate. They can cause allergic reactions on the skin.

4.1 Description of first aid measures.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

Eye contact.

Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact.

Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners.

Ingestion.

If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

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

Irritant Product, repeated or prolonged contact with skin or mucous membranes can cause redness, blisters or dermatitis, inhalation of spray mist or particles in suspension may cause irritation of the respiratory tract, some symptoms may not be immediate.

It may cause an allergic reaction, dermatitis, redness or inflammation of the skin.

4.3 Indication of any immediate medical attention and special treatment needed.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. Cover the affected area with a dry sterile bandage. Protect the affected area from pressure or friction.

SECTION 5: FIREFIGHTING MEASURES.

Flammable product, the necessary prevention measures should be taken in order to avoid risks, In case of fire, the following measures are recommended:

5.1 Extinguishing media.

Suitable extinguishing media:

Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

STEPSBB1-89.- POLYURETHANE FLOOR ENAMEL

Version 1 Date of compilation: 26/10/2020

Page 4 of 15
Print date: 30/10/2020

Unsuitable extinguishing media:

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the substance or mixture.

Special risks.

Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

During a fire and depending on its magnitude the following may occur:

- Flammable vapors or gases.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways. Follow the instructions given in the emergency or fire evacuation plan or plans if available.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots. During extinction and depending on the magnitude and proximity to the fire, additional protective equipment such as chemical protection gloves, heat-reflecting suits or gas-tight suits may be required.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

Eliminate possible ignition points and ventilate the area. No smoking. Avoid breathing fumes. For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Prevent the contamination of drains, surface or subterranean waters, and the ground.

6.3 Methods and material for containment and cleaning up.

Contain and collect spillage with inert absorbent material (earth, sand, vermiculite, Kieselguhr...) and clean the area immediately with a suitable decontaminant.

Deposit waste in closed and suitable containers for disposal, in compliance with local and national regulations

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

The fumes are heavier than air and can spread across the ground. They can form explosive mixtures with air. Prevent the creation of flammable or explosive fume concentrations in the air; prevent fume concentrations above work exposure limits. The product must only be used in areas where all unprotected flames and other ignition points have been eliminated. Electrical equipment has to be protected according to applicable standards.

The product can be electrostatically charged: always use earth grounds when transferring the product. Operators must use anti-static footwear and clothing, and floors must be conductors.

Keep the container tightly closed and isolated from heat sources, sparks, and fire. Do not use tools that can cause sparks. For personal protection, see section 8.

In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety.

Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store according to local legislation. Observe indications on the label. Store the containers between 5 and 25° C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

STEPSBB1-89.- POLYURETHANE FLOOR ENAMEL

Version 1 Date of compilation: 26/10/2020

Page 5 of 15
Print date: 30/10/2020

The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3 Specific end use(s).

Not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

Work exposure limit for:

Name	CAS No.	Country	Limit value	ppm	mg/m ³
xylene	1330-20-7	European Union [1]	Eight hours	50 (skin)	221 (skin)
			Short term	100 (skin)	442 (skin)
		United Kingdom [2]	Eight hours	50	220
			Short term	100	441
		Éire [3]	Eight hours	50	221
			Short term	100	442
		United States [4] (Cal/OSHA)	Eight hours	100	
			Short term	150 (Ceiling) 300	
		United States [5] (NIOSH)	Eight hours	100	
			Short term	150	
United States [6] (OSHA)	Eight hours	100	435		
	Short term				
Titanium dioxide	13463-67-7	United Kingdom [2]	Eight hours		10 (total inhalable)
			Short term		
		Éire [3]	Eight hours		10 (Inhalable dust) 4 (Respirable dust)
			Short term		
2-methoxy-1-methylethyl acetate	108-65-6	European Union [1]	Eight hours	50 (skin)	275 (skin)
			Short term	100 (skin)	550 (skin)
		United Kingdom [2]	Eight hours	50	274
			Short term	100	548
		Éire [3]	Eight hours	50	275
			Short term	100	550
ethylbenzene	100-41-4	European Union [1]	Eight hours	100 (skin)	442 (skin)
			Short term	200 (skin)	884 (skin)
		United Kingdom [2]	Eight hours	100	441
			Short term	125	552
		Éire [3]	Eight hours	100	442
			Short term	200	884
		United States [4] (Cal/OSHA)	Eight hours	5	
			Short term	30	
		United States [5] (NIOSH)	Eight hours	100	
			Short term	125	
United States [6] (OSHA)	Eight hours	100	435		
	Short term				
2,6-dimethylheptan-4-one, di-isobutyl ketone	108-83-8	United Kingdom [2]	Eight hours	25	148
			Short term		
		Éire [3]	Eight hours	25	150
			Short term		
		United States [4] (Cal/OSHA)	Eight hours	25	
			Short term		
United States [5] (NIOSH)	Eight hours	25			
	Short term				

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

STEPSBB1-89.- POLYURETHANE FLOOR ENAMEL

Version 1 Date of compilation: 26/10/2020

Page 6 of 15
Print date: 30/10/2020

		United States [6] (OSHA)	Eight hours	50	290
			Short term		
hexamethylene-di-isocyanate	822-06-0	Éire [3]	Eight hours	0,005	
			Short term		
butan-1-ol	71-36-3	United Kingdom [2]	Eight hours		
			Short term	50	154
		Éire [3]	Eight hours	20	
			Short term		
		United States [4] (Cal/OSHA)	Eight hours	(Ceiling) 50	
			Short term		
		United States [5] (NIOSH)	Eight hours	(Ceiling) 50	
			Short term		
		United States [6] (OSHA)	Eight hours	100	300
			Short term		

[1] According both Binding Occupational Exposure Limits (BOELVs) and Indicative Occupational Exposure Limits (IOELVs) adopted by Scientific Committee for Occupational Exposure Limits to Chemical Agents (SCOEL).

[2] According Limit Value (IOELV) list in 2nd Indicative Occupational Exposure adopted by Health and Safety Executive.

[3] According Code of Practice for the Safety, Health and Welfare at Work (Chemicals Agents) Regulations adopted by Health and Safety Authority (HSA).

[4] California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).

[5] According Compendium of Policy Documents and Statements adopted by National Institute for Occupational Safety and Health (NIOSH).

[6] According Occupational Health and Safety Standards and US Code of Federal Regulations adopted by US Occupational Safety and Health Administration (OSHA).

The product does NOT contain substances with Biological Limit Values.

Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Type	Value
xylene CAS No: 1330-20-7 EC No: 215-535-7	DNEL (Workers)	Inhalation, Long-term, Systemic effects	77 (mg/m ³)
Titanium dioxide CAS No: 13463-67-7 EC No: 236-675-5	DNEL (Workers)	Inhalation, Long-term, Local effects	10 (mg/m ³)
2-methoxy-1-methylethyl acetate CAS No: 108-65-6 EC No: 203-603-9	DNEL (Workers)	Inhalation, Long-term, Systemic effects	275 (mg/m ³)
	DNEL (General population)	Inhalation, Long-term, Systemic effects	33 (mg/m ³)
	DNEL (Workers)	Dermal, Long-term, Systemic effects	153,5 (mg/kg bw/day)
	DNEL (General population)	Dermal, Long-term, Systemic effects	54,8 (mg/kg bw/day)
ethylbenzene CAS No: 100-41-4 EC No: 202-849-4	DNEL (Workers)	Inhalation, Long-term, Systemic effects	77 (mg/m ³)
	DNEL (Workers)	Inhalation, Long-term, Systemic effects	1,67 (mg/kg bw/day)
2,6-dimethylheptan-4-one, di-isobutyl ketone CAS No: 108-83-8 EC No: 203-620-1	DNEL (Workers)	Inhalation, Long-term, Local effects	290 (mg/m ³)
	DNEL (Workers)	Inhalation, Long-term, Systemic effects	479 (mg/m ³)
hexamethylene-di-isocyanate CAS No: 822-06-0 EC No: 212-485-8	DNEL (Workers)	Inhalation, Long-term, Local effects	0,035 (mg/m ³)
	DNEL (Workers)	Inhalation, Long-term, Systemic effects	0,035 (mg/m ³)
butan-1-ol CAS No: 71-36-3 EC No: 200-751-6	DNEL (Workers)	Inhalation, Long-term, Local effects	310 (mg/m ³)
	DNEL (General population)	Inhalation, Long-term, Local effects	55 (mg/m ³)

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

STEPSBB1-89.- POLYURETHANE FLOOR ENAMEL

Version 1 Date of compilation: 26/10/2020

Page 7 of 15
Print date: 30/10/2020

	DNEL (General population)	Oral, Long-term, Systemic effects	3,125 (mg/kg bw/day)
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DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.

DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum. Concentration levels PNEC:

Name	Details	Value
2-methoxy-1-methylethyl acetate CAS No: 108-65-6 EC No: 203-603-9	aqua (freshwater)	0,635 (mg/L)
	aqua (marine water)	0,0635 (mg/L)
	aqua (intermittent releases)	6,35 (mg/L)
	STP	100 (mg/L)
	sediment (freshwater)	3,29 (mg/kg sediment dw)
	sediment (marine water)	0,329 (mg/kg sediment dw)
	soil	0,29 (mg/kg soil dw)
butan-1-ol CAS No: 71-36-3 EC No: 200-751-6	aqua (freshwater)	0,082 (mg/L)
	aqua (marine water)	0,0082 (mg/L)
	aqua (intermittent releases)	2,25 (mg/L)
	STP	2476 (mg/L)
	sediment (freshwater)	0,178 (mg/kg sediment dw)
	sediment (marine water)	0,0178 (mg/kg sediment dw)
	soil	0,015 (mg/kg soil dw)

PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.

8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %		
Uses:			
Breathing protection:	If the recommended technical measures are observed, no individual protection equipment is necessary.		
Hand protection:	PPE: Work gloves. Characteristics: «CE» marking, category I. CEN standards: EN 374-1, En 374-2, EN 374-3, EN 420 Maintenance: Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives. Observations: Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.		
Material:	PVC (polyvinyl chloride)	Breakthrough time (min.):	> 480
		Material thickness (mm):	0,35
Eye protection:	PPE: Face shield. Characteristics: «CE» marking, category II. Face and eye protector against splashing liquid. CEN standards: EN 165, EN 166, EN 167, EN 168		



-Continued on next page.-



SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

STEPSBB1-89.- POLYURETHANE FLOOR ENAMEL

Version 1 Date of compilation: 26/10/2020

Page 8 of 15
Print date: 30/10/2020

Maintenance:	Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions. Make sure that mobile parts move smoothly.	
Observations:	Face shields should offer a field of vision with a dimension in the central line of, at least, 150 mm vertically once attached to the frame.	
Skin protection:		
PPE:	Anti-static protective clothing.	
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.	
CEN standards:	EN 340, EN 1149-1, EN 1149-2, EN 1149-3, EN 1149-5	
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.	
Observations:	The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.	
PPE:	Anti-static safety footwear.	
Characteristics:	«CE» marking, category II.	
CEN standards:	EN ISO 13287, EN ISO 20344, EN ISO 20346	
Maintenance:	The footwear should be checked regularly	
Observations:	The level of comfort during use and acceptability are factors that are assessed very differently depending on the user. Therefore, it is advisable to try on different footwear models and, if possible, different widths.	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance: Liquid with characteristic odour

Colour: N.A./N.A.

Odour: N.A./N.A.

Odour threshold: N.A./N.A.

pH: N.A./N.A.

Melting point: N.A./N.A.

Boiling Point: N.A./N.A.

Flash point: 36 °C

Evaporation rate: N.A./N.A.

Inflammability (solid, gas): N.A./N.A.

Lower Explosive Limit: N.A./N.A.

Upper Explosive Limit: N.A./N.A.

Vapour pressure: N.A./N.A.

Vapour density: N.A./N.A.

Relative density: 1.31-1.37

Solubility: N.A./N.A.

Liposolubility: N.A./N.A.

Hydrosolubility: N.A./N.A.

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

Auto-ignition temperature: N.A./N.A.

Decomposition temperature: N.A./N.A.

Viscosity: N.A./N.A.

Explosive properties: N.A./N.A.

Oxidizing properties: N.A./N.A.

N.A./N.A. = Not Available/Not Applicable due to the nature of the product

9.2 Other information.

Dropping point: N.A./N.A.

Blink: N.A./N.A.

Kinematic viscosity: N.A./N.A.

N.A./N.A. = Not Available/Not Applicable due to the nature of the product

SECTION 10: STABILITY AND REACTIVITY.

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

STEPSBB1-89.- POLYURETHANE FLOOR ENAMEL

Version 1 Date of compilation: 26/10/2020

Page 9 of 15
Print date: 30/10/2020

10.1 Reactivity.

If the storage conditions are satisfied, does not produce dangerous reactions.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions (see section 7).

10.3 Possibility of hazardous reactions.

Flammable liquid and vapour.

10.4 Conditions to avoid.

Avoid the following conditions:

- High temperature.
- Static discharge.
- Contact with incompatible materials.
- Avoid temperatures near or above the flash point. Do not heat closed containers. Avoid direct sunlight and heat, as these may cause a risk of fire.

10.5 Incompatible materials.

Avoid the following materials:

- Explosives materials.
- Toxic materials.
- Oxidizing materials.

10.6 Hazardous decomposition products.

In case of fire, dangerous decomposition products can be generated, such as carbon monoxide and dioxide and nitrogen fumes and oxides.

SECTION 11: TOXICOLOGICAL INFORMATION.

IRRITANT MIXTURE. Its repeated or prolonged contact with the skin or mucous membranes can cause irritant symptoms such as reddening of the skin, blisters, or dermatitis. Some of the symptoms may not be immediate. They can cause allergic reactions on the skin.

11.1 Information on toxicological effects.

Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

Exposure to concentrations of solvent fumes above the work exposure limit can have negative effects (for example, irritation of the mucous membranes and respiratory system, adverse effects on the kidneys, liver, and the central nervous system). Among the symptoms are headaches, vertigo, fatigue, muscular weakness, drowsiness, and in extreme cases, unconsciousness.

Based on the properties of isocyanates and taking into account existing technical data on similar products, it appears that this product may cause irritation and / or acute awareness of the respiratory system, leading to an asthmatic condition, a wheezing and chest pressure. Therefore, sensitized individuals may show asthmatic symptoms when exposed to atmospheres containing concentrations below the level of exposure. Repeated exposure can lead to chronic respiratory diseases.

Toxicological information about the substances present in the composition.

Name	Acute toxicity			
	Type	Test	Kind	Value
xylene CAS No: 1330-20-7 EC No: 215-535-7	Oral	LD50	Rat	4300 mg/kg bw [1]
		[1] AMA Archives of Industrial Health. Vol. 14, Pg. 387, 1956		
	Dermal	LD50	Rabbit	> 1700 mg/kg bw [1]
2-methoxy-1-methylethyl acetate	Inhalation	LC50	Rat	21,7 mg/l/4 h [1]
	[1] Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 123, 1974			
	Oral	LD50	Rat	6190 mg/kg bw [1]
		[1] Study report, 1985. OECD Guideline 401 (Acute Oral Toxicity).		
	Dermal	LD50	Rabbit	>5000 mg/kg bw [1]

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

STEPSBB1-89.- POLYURETHANE FLOOR ENAMEL

Version 1 Date of compilation: 26/10/2020

Page 10 of 15
Print date: 30/10/2020

CAS No: 108-65-6 EC No: 203-603-9	Inhalation	[1] Dow Chemical Company Reports. Vol. MSD-1582 LC0 Rat >4345 ppm (6 h) [1]
		[1] Study report, 1980. OECD Guideline 403 (Acute Inhalation Toxicity).
ethylbenzene CAS No: 100-41-4 EC No: 202-849-4	Oral	LD50 Rat 3500 mg/kg bw [1] [1] AMA Archives of Industrial Health. Vol. 14, Pg. 387, 1956
	Dermal	LD50 Rabbit 15400 mg/kg bw [1] [1] Food and Cosmetics Toxicology. Vol. 13, Pg. 803, 1975
	Inhalation	
butan-1-ol CAS No: 71-36-3 EC No: 200-751-6	Oral	LD50 Rat 4360 mg/kg bw [1] [1] Union Carbide Corp. Bushy Run Research Center, Project Report No.14-73. Export, PA. 1951.
	Dermal	LD50 Rabbit 3402 mg/kg bw [1] [1] Union Carbide Corp. Bushy Run Research Center, Project Report No.14-73. Export, PA. 1951.
	Inhalation	LC50 Rat 7500 ppm (8 h) [1] [1] Union Carbide Corp. Bushy Run Research Center, Project Report No.14-73. Export, PA. 1951.

a) acute toxicity;

Not conclusive data for classification.

Acute Toxicity Estimate (ATE):

Mixtures:

ATE (Dermal) = 3.276 mg/kg

b) skin corrosion/irritation;

Product classified:

Skin irritant, Category 2: Causes skin irritation.

c) serious eye damage/irritation;

Based on available data, the classification criteria are not met.

d) respiratory or skin sensitisation;

Product classified:

Skin sensitiser, Category 1: May cause an allergic skin reaction.

e) germ cell mutagenicity;

Not conclusive data for classification.

f) carcinogenicity;

Not conclusive data for classification.

g) reproductive toxicity;

Not conclusive data for classification.

h) STOT-single exposure;

Based on available data, the classification criteria are not met.

i) STOT-repeated exposure;

Based on available data, the classification criteria are not met.

j) aspiration hazard;

Based on available data, the classification criteria are not met.

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

STEPSBB1-89.- POLYURETHANE FLOOR ENAMEL

Version 1 Date of compilation: 26/10/2020

Page 11 of 15
Print date: 30/10/2020

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

Name	Ecotoxicity			
	Type	Test	Kind	Value
xylene CAS No: 1330-20-7 EC No: 215-535-7	Fish	LC50	Fish	15,7 mg/l (96 h) [1] [1] Bailey, H.C., D.H.W. Liu, and H.A. Javitz 1985. Time/Toxicity Relationships in Short-Term Static, Dynamic, and Plug-Flow Bioassays. In: R.C.Bahner and D.J.Hansen (Eds.), Aquatic Toxicology and Hazard Assessment, 8th Symposium, ASTM STP 891, Philadelphia, PA :193-212
	Aquatic invertebrates	LC50	Crustacean	8,5 mg/l (48 h) [1] [1] Tatem, H.E., B.A. Cox, and J.W. Anderson 1978. The Toxicity of Oils and Petroleum Hydrocarbons to Estuarine Crustaceans. Estuar.Coast.Mar.Sci. 6(4):365-373. Tatem, H.E. 1975. The Toxicity and Physiological Effects of Oil and Petroleum Hydrocarbons on Estuarine Grass Shrimp Palaemonetes pugio (Holthuis). Ph.D.Thesis, Texas A&M University, College Station, TX :133 p
	Aquatic plants			
2-methoxy-1-methylethyl acetate CAS No: 108-65-6 EC No: 203-603-9	Fish	LC50	Oryzias latipes	100 mg/L (96 h) [1] [1] Environment Agency of Japan (1998)
	Aquatic invertebrates	EC50	Daphnia magna	407 mg/L (48 h) [1] [1] Environment Agency of Japan (1998)
	Aquatic plants	EC50	Selenastrum capricornutum (Pseudokirchnerella subcapitata)	>1000 mg/L (72 h) [1] [1] Environment Agency of Japan (1998)
ethylbenzene CAS No: 100-41-4 EC No: 202-849-4	Fish	LC50	Fish	80 mg/l (96 h) [1] [1] Mayer, F.L.Jr., and M.R. Ellersieck 1986. Manual of Acute Toxicity: Interpretation and Data Base for 410 Chemicals and 66 Species of Freshwater Animals. Resour.Publ.No.160, U.S.Dep.Interior, Fish Wildl.Serv., Washington, DC :505 p. (USGS Data File)
	Aquatic invertebrates	LC50	Crustacean	16,2 mg/l (48 h) [1] [1] MacLean, M.M., and K.G. Doe 1989. The Comparative Toxicity of Crude and Refined Oils to Daphnia magna and Artemia. Environment Canada, EE-111, Dartmouth, Nova Scotia :64 p
	Aquatic plants	EC50	Algae	5 mg/l (72 h) [1] [1] Galassi, S., M. Mingazzini, L. Vigano, D. Cesareo, and M.L. Tosato 1988. Approaches to Modeling Toxic Responses of Aquatic Organisms to Aromatic Hydrocarbons. Ecotoxicol.Envirion.Saf. 16(2):158-169. Masten, L.W., R.L. Boeri, and J.D. Walker 1994. Strategies Employed to Determine the Acute Aquatic Toxicity of Ethyl Benzene, a Highly Volatile, Poorly Water-Soluble Chemical. Ecotoxicol.Envirion.Saf. 27(3):335-348
butan-1-ol	Fish	LC50	Pimephales promelas	1376 mg/L (96 h) [1]

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

STEPSBB1-89.- POLYURETHANE FLOOR ENAMEL

Version 1 Date of compilation: 26/10/2020

Page 12 of 15
Print date: 30/10/2020

CAS No: 71-36-3 EC No: 200-751-6		[1] Wong, D.C.L, P.B. Dorn, and J.P. Salanitro. 1998. Aquatic Toxicity of Four Oxy-Solvents. Equilon Enterprises, LLC Technical Information Record WTC-3520.
	Aquatic invertebrates	EC50 Daphnia magna 1328 mg/L (48 h) [1] [1] Wong, D.C.L, P.B. Dorn, and J.P. Salanitro. 1998. Aquatic Toxicity of Four Oxy-Solvents. Equilon Enterprises, LLC Technical Information Record WTC-3520.
	Aquatic plants	EC90 Selenastrum capricornutum (Pseudokirchnerella subcapitata) 717 mg/L (96 h) [1] [1] Wong, D.C.L, P.B. Dorn, and J.P. Salanitro. 1998. Aquatic Toxicity of Four Oxy-Solvents. Equilon Enterprises, LLC Technical Information Record WTC-3520.

12.2 Persistence and degradability.

No information is available regarding the biodegradability of the substances present.

No information is available on the degradability of the substances present.No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.

Information about the bioaccumulation of the substances present.

Name	Bioaccumulation			
	Log Pow	BCF	NOECs	Level
ethylbenzene CAS No: 100-41-4 EC No: 202-849-4	3,15	-	-	Moderate
2,6-dimethylheptan-4-one, di-isobutyl ketone CAS No: 108-83-8 EC No: 203-620-1	2,56	-	-	Low
butan-1-ol CAS No: 71-36-3 EC No: 200-751-6	0,84	-	-	Very low

12.4 Mobility in soil.

No information is available about the mobility in soil.

The product must not be allowed to go into sewers or waterways.

Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13: DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

STEPSBB1-89.- POLYURETHANE FLOOR ENAMEL

Version 1 Date of compilation: 26/10/2020

Page 13 of 15
Print date: 30/10/2020

SECTION 14: TRANSPORT INFORMATION.

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/IATA for air transport.

Land: Transport by road: ADR, Transport by rail: RID.

Transport documentation: Consignment note and written instructions

Sea: Transport by ship: IMDG.

Transport documentation: Bill of lading

Air: Transport by plane: ICAO/IATA.

Transport document: Airway bill.

14.1 UN number.

UN No: UN1263

14.2 UN proper shipping name.

Description:

ADR: UN 1263, PAINT RELATED MATERIAL, 3, PG III, (D/E)

IMDG: UN 1263, PAINT RELATED MATERIAL, 3, PG III

ICAO/IATA: UN 1263, PAINT RELATED MATERIAL, 3, PG III

14.3 Transport hazard class(es).

Class(es): 3

14.4 Packing group.

Packing group: III

14.5 Environmental hazards.

Marine pollutant: No

14.6 Special precautions for user.

Labels: 3



Hazard number: 30

ADR LQ: 5 L

IMDG LQ: 5 L

ICAO LQ: 10 L

Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR.

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-E,S-E

Proceed in accordance with point 6.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.

The product is not transported in bulk.

SECTION 15: REGULATORY INFORMATION.

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

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Volatile organic compound (VOC)

Product Subcategory (Directive 2004/42/EC): E - Special finishes (All types)

Phase I* (from 01/01/2007): 840 g/l

Phase II* (from 01/01/2010): 840 g/l

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

STEPSBB1-89.- POLYURETHANE FLOOR ENAMEL

Version 1 Date of compilation: 26/10/2020

Page 14 of 15
Print date: 30/10/2020

(*) g/l ready to use

VOC content (p/p): 26,965 %

VOC content: 353,245 g/l

The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): N/A

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

Complete text of the H phrases that appear in section 3:

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.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
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.
H373	May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. (órganos de audición)

Classification codes:

Acute Tox. 3 : Acute toxicity (Inhalation), Category 3
Acute Tox. 4 : Acute toxicity (Dermal), Category 4
Acute Tox. 4 : Acute toxicity (Inhalation), Category 4
Acute Tox. 4 : Acute toxicity (Oral), Category 4
Asp. Tox. 1 : Aspiration toxicity, Category 1
Eye Dam. 1 : Serious eye damage, Category 1
Eye Irrit. 2 : Eye irritation, Category 2
Flam. Liq. 2 : Flammable liquid, Category 2
Flam. Liq. 3 : Flammable liquid, Category 3
Resp. Sens. 1 : Respiratory sensitiser, Category 1
Skin Irrit. 2 : Skin irritant, Category 2
Skin Sens. 1 : Skin sensitiser, Category 1
STOT RE 2 : Specific target organ toxicity following a repeated exposure, Category 2
STOT SE 3 : Specific target organ toxicity following a single exposure, Category 3

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

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

STEPSBB1-89.- POLYURETHANE FLOOR ENAMEL

Version 1 Date of compilation: 26/10/2020

Page 15 of 15
Print date: 30/10/2020

Physical hazards	On basis of test data
Health hazards	Calculation method
Environmental hazards	Calculation method

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Abbreviations and acronyms used:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
BCF: Bioconcentration factor.
CEN: European Committee for Standardization.
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.
DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
EC50: Half maximal effective concentration.
PPE: Personal protection equipment.
IATA: International Air Transport Association.
ICAO: International Civil Aviation Organization.
IMDG: International Maritime Code for Dangerous Goods.
LC50: Lethal concentration, 50%.
LD50: Lethal dose, 50%.
Log Pow: Logarithm of the partition octanol-water.
NOEC: No observed effect concentration.
PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.

Key literature references and sources for data:

<http://eur-lex.europa.eu/homepage.html>
<http://echa.europa.eu/>
Regulation (EU) 2015/830.
Regulation (EC) No 1907/2006.
Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.