

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

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

#### 1.1 Product identifier

Product name : Hempafire Pro 400 Fast Dry  
Product identity : 4349110000, 00137E10  
Product type : Paint. intumescent

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

Field of application : buildings and metal industry.  
Identified uses : Industrial applications, Professional applications, Used by spraying.

#### 1.3 Details of the supplier of the safety data sheet

Company details : HEMPEL A/S  
Lundtoftøgårdsvej 91  
DK-2800 Kgs. Lyngby  
Denmark  
Tel.: + 45 45 93 38 00  
hempel@hempel.com  
Date of issue : 20 June 2025  
Date of previous issue : 12 June 2025.

#### 1.4 Emergency telephone number

Emergency telephone number (with hours of operation)  
  
+45 45 93 38 00 (08.00 - 17.00)  
See section 4 First aid measures.

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Product definition : Mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 2, H225	FLAMMABLE LIQUIDS
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION
Carc. 2, H351	CARCINOGENICITY
Repr. 2, H361fd	TOXIC TO REPRODUCTION
STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects)
STOT RE 2, H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE)

See Section 11 for more detailed information on health effects and symptoms.

#### 2.2 Label elements

Hazard pictograms :



Signal word : Danger

Hazard statements :  
H225 - Highly flammable liquid and vapor.  
H315 - Causes skin irritation.  
H336 - May cause drowsiness or dizziness.  
H351 - Suspected of causing cancer.  
H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child.  
H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements :

Prevention : Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapor, mist or spray.

Hazardous ingredients :  
toluene  
Isomelamine

Supplemental label elements :  
Contains octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine. May produce an allergic reaction.  
Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

#### Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

## SECTION 2: Hazards identification

### 2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : None known.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≥10 - ≤25	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304	[1] [2]
titanium dioxide	REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7 Index: 022-006-00-2	≥5 - ≤10	Carc. 2, H351 (inhalation)	[1] [*]
Isomelamine	REACH #: 01-2119485947-16 EC: 203-615-4 CAS: 108-78-1 Index: 613-345-00-2	≥5 - <10	Carc. 2, H351 Repr. 2, H361f STOT RE 2, H373 (urinary system)	[1] [3]
butanone	REACH #: 01-2119457290-43 EC: 201-159-0 CAS: 78-93-3 Index: 606-002-00-3	≥3 - ≤5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[1] [2]
octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	REACH #: 01-2119979085-27 EC: 309-629-8 CAS: 100545-48-0	≤0.3	Skin Sens. 1B, H317	[1]
See Section 16 for the full text of the H statements declared above.				

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

### Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit, see section 8.

[3] Substance of equivalent concern

[\*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with aerodynamic diameter ≤ 10 µm not bound within a matrix.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General :	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate treatment (first aid).
Eye contact :	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention/advice.
Inhalation :	Remove to fresh air and keep at rest in a position comfortable for breathing. Give nothing by mouth. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately.
Skin contact :	Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Remove contaminated clothing and shoes.
Ingestion :	If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.
Protection of first-aiders :	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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

### SECTION 4: First aid measures

#### Potential acute health effects

Eye contact :	No known significant effects or critical hazards.
Inhalation :	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact :	Causes skin irritation.
Ingestion :	Can cause central nervous system (CNS) depression.

#### Over-exposure signs/symptoms

Eye contact :	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation :	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact :	Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion :	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

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

Notes to physician :	If gasses have been inhaled, from the decomposition of the product, symptoms may be delayed. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments :	No specific treatment.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Extinguishing media :	Recommended: alcohol resistant foam, CO <sub>2</sub> , powders, water spray. Not to be used: waterjet.
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#### 5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture :	Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
Hazardous combustion products :	Decomposition products may include the following materials: carbon oxides nitrogen oxides phosphorus oxides halogenated compounds carbonyl halides metal oxide/oxides

#### 5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

#### 6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

#### 6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

#### 6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

#### 7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### Occupational exposure limits

Product/ingredient name	Exposure limit values
toluene	<b>EU OEL (Europe, 1/2022)</b> Absorbed through skin. TWA 8 hours: 192 mg/m <sup>3</sup> . TWA 8 hours: 50 ppm. STEL 15 minutes: 384 mg/m <sup>3</sup> . STEL 15 minutes: 100 ppm.
butanone	
	<b>EU OEL (Europe, 1/2022)</b> TWA 8 hours: 200 ppm. TWA 8 hours: 600 mg/m <sup>3</sup> . STEL 15 minutes: 300 ppm. STEL 15 minutes: 900 mg/m <sup>3</sup> .

##### Biological exposure indices

Product/ingredient name	Exposure limit values
No exposure limit value known.	

### SECTION 8: Exposure controls/personal protection

#### Recommended monitoring procedures

Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### Derived effect levels

Product/ingredient name	Type - Population - Exposure	Value	Effects
toluene	DNEL - Workers - Long term - Dermal	384 mg/kg bw/day	Effects: Systemic
Isomelamine	DNEL - Workers - Long term - Inhalation	192 mg/m <sup>3</sup>	Effects: Systemic
	DNEL - Workers - Long term - Dermal	11.8 mg/kg bw/day	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	8.3 mg/m <sup>3</sup>	Effects: Systemic
butanone	DNEL - Workers - Long term - Dermal	1161 mg/kg bw/day	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	600 mg/m <sup>3</sup>	Effects: Systemic

#### Predicted effect concentrations

Product/ingredient name	Compartment Detail	Value
toluene	Fresh water	0.68 mg/l
	Marine water	0.68 mg/l
	Sewage Treatment Plant	13.61 mg/l
	Fresh water sediment	16.39 mg/kg
	Marine water sediment	16.39 mg/kg
	Soil	2.89 mg/kg
Isomelamine	Fresh water - Assessment Factors	0.51 mg/l
	Marine water - Assessment Factors	0.051 mg/l
	Sewage Treatment Plant - Assessment Factors	200 mg/l
	Fresh water sediment - Assessment Factors	2.524 mg/kg dwt
	Marine water sediment - Assessment Factors	0.252 mg/kg dwt
	Soil - Assessment Factors	0.206 mg/kg dwt
butanone	Fresh water	55.8 mg/l
	Marine water	55.8 mg/l
	Sewage Treatment Plant	709 mg/l
	Sediment	284.7 mg/kg dwt
	Soil	22.5 mg/kg dwt

### 8.2 Exposure controls

#### Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

#### Individual protection measures

General :	Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.
Hygiene measures :	Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.
Eye/face protection :	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Hand protection :	<p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.</p> <p>Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:</p> <p>Recommended: polyvinyl alcohol (PVA), Silver Shield / Barrier / 4H gloves, Viton®</p> <p>May be used: butyl rubber (&gt;0.5 mm), butyl rubber (&gt;0.3 mm), nitrile rubber (&gt;0.3 mm)</p> <p>Short term exposure: neoprene rubber (&gt;0.1 mm), natural rubber (latex) (&gt;0.4 mm), polyvinyl chloride (PVC), nitrile rubber (&gt;0.1 mm)</p>
Body protection :	Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.

### SECTION 8: Exposure controls/personal protection

Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. (EN140) Be sure to use an approved/certified respirator or equivalent.

**This product contains low-boiling point liquids. Any respiratory protective equipment should be air-fed or organic vapor filter (Type AX).**

#### Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Physical state : Liquid.

Color : White

Odor : Solvent-like

pH : Testing not relevant or not possible due to nature of the product.

Melting point/freezing point : Testing not relevant or not possible due to nature of the product.

Boiling point/boiling range : Testing not relevant or not possible due to nature of the product.

Flash point : Closed cup: -2°C (28.4°F)

Evaporation rate : Testing not relevant or not possible due to nature of the product.

Flammability : Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.  
Highly flammable in the presence of the following materials or conditions: heat and oxidizing materials.

Vapor pressure : Not applicable. [50°C (122°F)]

Vapor density : Not available.

Specific gravity : 1.33 g/cm<sup>3</sup>

Partition coefficient (LogKow) : Testing not relevant or not possible due to nature of the product.

Auto-ignition temperature :

Ingredient name	°C	°F	Method
pentaerythritol	>400	>752	EU A.16

Decomposition temperature : Testing not relevant or not possible due to nature of the product.

Viscosity : Aspiration hazard (H304) Not classified. Testing not relevant due to nature of the product.

Explosive properties : Testing not relevant or not possible due to nature of the product.

Oxidizing properties : Testing not relevant or not possible due to nature of the product.

#### 9.2 Other information

Solvent(s) % by weight : Weighted average: 26 %

Water % by weight : Weighted average: 0 %

VOC content : 326 g/l (Measured)

Solvent Gas : Weighted average: 0.093 m<sup>3</sup>/l

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

#### 10.2 Chemical stability

The product is stable.

#### 10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

### SECTION 10: Stability and reactivity

#### 10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

#### 10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials.

Reactive or incompatible with the following materials: reducing materials and acids.

#### 10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides nitrogen oxides phosphorus oxides halogenated compounds carbonyl halides metal oxide/oxides

### SECTION 11: Toxicological information

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

#### Acute toxicity

Product/ingredient name	Result	Dose / Exposure	Effects
toluene	Rat - Oral - LD50	636 mg/kg	
titanium dioxide	Rat - Inhalation - LC50 Vapor	>20 mg/l [4 hours]	
	Rat - Oral - LD50	>5000 mg/kg	
	Rabbit - Dermal - LD50	>5000 mg/kg	
	Rat - Inhalation - LC50 Dusts and mists	>6.8 mg/l [4 hours]	
Isomelamine	Rabbit - Skin - LD50	>1000 mg/kg	
butanone	Rat - Oral - LD50	3161 mg/kg	
	Rabbit - Dermal - LD50	6480 mg/kg	

#### Acute toxicity estimates

Product/ingredient name	Oral mg/kg	Dermal mg/kg	Inhalation (gases) ppm	Inhalation (vapors) mg/l	Inhalation (dusts and mists) mg/l
Isomelamine	3161				
butanone		6480			

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Exposure
toluene	Rabbit - Eyes - Mild irritant	Duration of treatment/ exposure: 0.5 minutes	Amount/concentration applied: 100 mg
	Rabbit - Skin - Moderate irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 20 mg
titanium dioxide	Human - Skin - Mild irritant	Duration of treatment/ exposure: 72 hours	Amount/concentration applied: 300 Micrograms Intermittent
Isomelamine	Rabbit - Eyes - Mild irritant		
butanone	Rabbit - Skin - Mild irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 402 milligrams
octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	Rabbit - Skin - Mild irritant		
	Rabbit - Eyes - Mild irritant		

#### Sensitizer

No known data available in our database.

#### Mutagenic effects

No known data available in our database.

#### Carcinogenicity



### SECTION 11: Toxicological information

No known data available in our database.

#### Reproductive toxicity

No known data available in our database.

#### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
toluene	Category 3		Narcotic effects
butanone	Category 3		Narcotic effects

#### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
toluene	Category 2	-	-
Isomelamine	Category 2	-	urinary system

#### Aspiration hazard

Product/ingredient name	Result
toluene	ASPIRATION HAZARD - Category 1

#### Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

#### Potential chronic health effects

No known significant effects or critical hazards.

#### 11.2 Information on other hazards

Endocrine disrupting properties : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

Other information : No additional known significant effects or critical hazards.

### SECTION 12: Ecological information

#### 12.1 Toxicity

Do not allow to enter drains or watercourses.

Product/ingredient name	Result	Species	Exposure
toluene	Chronic - NOEC - Fresh water Chronic - NOEC - Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> Algae - Green algae - <i>Pseudokirchneriella subcapitata</i>	1000 µg/l [21 days] <500000 µg/l [96 hours]
titanium dioxide	Acute - LC50	Fish	>100 mg/l [96 hours]
Isomelamine	Acute - LC50 Acute - EC50 Acute - EC50	Daphnia Daphnia Fish	>100 mg/l [48 hours] >2000 mg/l [48 hours] >3000 mg/l [96 hours]
butanone	Acute - EC50	Algae	200 mg/l [96 hours]
octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	Acute - EC50 Acute - EC50	Daphnia - <i>Daphnia magna</i> Fish	308 mg/l [48 hours] >10 mg/l [96 hours]
	Acute - EC50 Acute - EC50	Daphnia Algae	>10 mg/l [48 hours] >100 mg/l [72 hours]

#### 12.2 Persistence and degradability

Product/ingredient name	Test	Result
toluene		100% [14 days] - Readily
butanone		98% [28 days] - Readily
octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	OECD Ready Biodegradability - Closed Bottle Test	89% [20 days] 22% [28 days] - Not readily



### SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
toluene Isomelamine butanone octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine			Readily Not readily Readily Not readily

#### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
toluene Isomelamine butanone octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	2.73 -1.22 0.3 5.86	90 <3.8 3 -	Low Low Low High

#### 12.4 Mobility in soil

##### Soil/Water partition coefficient

Product/ingredient name	logK <sub>oc</sub>	K <sub>oc</sub>
toluene Isomelamine butanone	2.07 1.66 1.2	117.115 45.8075 15.8984

#### Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
toluene	No	No	Yes	Yes	No	No	No
titanium dioxide	No	No	No	No	No	No	No
Isomelamine	No	No	Yes	Yes	No	No	Yes
butanone	No	No	Yes	No	No	No	Yes
octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	No	No	No	No	No	No	No

Mobility : The product does not meet the criteria to be considered as a PMT or vPvM.

#### 12.5 Results of PBT and vPvB assessment

##### Regulation (EC) No. 1907/2006 [REACH]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
toluene	No	No	No	Yes	No	No	No
titanium dioxide	No	No	No	No	No	No	No
Isomelamine	No	No	No	Yes	No	No	No
butanone	No	No	No	No	No	No	No
octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	No	No	No	No	No	No	No

##### Regulation (EC) No. 1272/2008 [CLP]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
toluene	No	No	No	Yes	No	No	No
titanium dioxide	No	No	No	No	No	No	No
Isomelamine	No	No	No	Yes	No	No	No
butanone	No	No	No	No	No	No	No
octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	No	No	No	No	No	No	No

Conclusion/Summary : The product does not meet the criteria to be considered as a PBT or vPvB.

#### 12.6 Endocrine disrupting properties

The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

#### 12.7 Other adverse effects

No known significant effects or critical hazards.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue no. (EWC) is given below.

European waste catalogue (EWC) : 08 01 11\*

#### Packaging

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

### SECTION 14: Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN / ID no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
<b>ADR/RID Class</b>	UN1263	PAINT	3	II	No.	<u>Special provisions</u> 640 (D) <u>Tunnel code</u> (D/E)
<b>IMDG Class</b>	UN1263	PAINT	3	II	No.	<u>Emergency schedules</u> F-E, S-E
<b>IATA Class</b>	UN1263	PAINT	3	II	No.	-

PG\* : Packing group

Env.\* : Environmental hazards

#### 14.6 Special precautions for user

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

#### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

### SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization - Substances of very high concern

#### Annex XIV

None of the components are listed.

#### Substances of very high concern

Ingredient name	Intrinsic property	Status	Reference number	Date of revision
Isomelamine	Substance of equivalent concern for human health	Candidate	12th recommendation	2/8/2024
Isomelamine	Substance of equivalent concern for environment	Candidate	12th recommendation	2/8/2024

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

#### Other EU regulations

#### Seveso category

This product is controlled under the Seveso III Directive.

<b>Seveso category</b>
P5c: Flammable liquids 2 and 3 not falling under P5a or P5b

### SECTION 15: Regulatory information

#### 15.2 Chemical Safety Assessment

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### SECTION 16: Other information

Abbreviations and acronyms :

ATE = Acute Toxicity Estimate  
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
 EUH statement = CLP-specific Hazard statement  
 RRN = REACH Registration Number  
 DNEL = Derived No Effect Level  
 PNEC = Predicted No Effect Concentration

Full text of abbreviated H statements :

H225 Highly flammable liquid and vapor.  
 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.  
 H336 May cause drowsiness or dizziness.  
 H351 Suspected of causing cancer.  
 H361d Suspected of damaging the unborn child.  
 H361f Suspected of damaging fertility.  
 H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 EUH066 Repeated exposure may cause skin dryness or cracking.

Full text of classifications [CLP/GHS] :

Asp. Tox. 1 ASPIRATION HAZARD - Category 1  
 Carc. 2 CARCINOGENICITY - Category 2  
 Eye Irrit. 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2  
 Flam. Liq. 2 FLAMMABLE LIQUIDS - Category 2  
 Repr. 2 TOXIC TO REPRODUCTION - Category 2  
 Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2  
 Skin Sens. 1B SKIN SENSITIZATION - Category 1B  
 STOT RE 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
 STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

#### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
FLAMMABLE LIQUIDS	On basis of test data
SKIN CORROSION/IRRITATION	Calculation method
CARCINOGENICITY	Calculation method
TOXIC TO REPRODUCTION	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects)	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE)	Calculation method

#### Notice to reader

Indicates information that has changed from previously issued version.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical performance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.