# SAFETY DATA SHEET

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

1.1 Product identifier

Product name : Envirolastic 2500 - Additive

**Product code** : E2500A

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

**Material uses** : Paint or paint related material.

: Industrial use only.

# 1.3 Details of the supplier of the safety data sheet

Sherwin-Williams UK Limited - Protective & Marine

Coatings Division EMEAI

Tower Works Kestor Street Bolton BL2 2AL

United Kingdom +44 (0) 1204 521771

The Sherwin-Williams Company Inver France SAS 2 Rue Jean Revaus - BP 80088 - 79102

Thouars CEDEX France

e-mail address of person responsible for this SDS

: hse.pm.emea@sherwin.com

#### 1.4 Emergency telephone number

# National advisory body/Poison Center

**Telephone number** : +45 82 12 12 12

**Supplier** 

**Telephone number** : +(44)-870-8200 418

Hours of operation : Emergency contact available 24 hours a day

# **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. 3, H226 Acute Tox. 4, H332 Skin Sens. 1, H317 STOT SE 3, H335 STOT SE 3, H336

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

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

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# **SECTION 2: Hazards identification**

# 2.2 Label elements

Hazard pictograms





Signal word : Warning

**Hazard statements**: Flammable liquid and vapor.

May cause an allergic skin reaction.

Harmful if inhaled.

May cause respiratory irritation. May cause drowsiness or dizziness.

**Precautionary statements** 

Prevention: Wear protective gloves. Keep away from heat, hot surfaces, sparks, open flames

and other ignition sources. No smoking. Avoid breathing vapor.

Response : IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off

contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of

water.

Storage: Not applicable.Disposal: Not applicable.Hazardous ingredients: n-butyl acetate

hexamethylene-di-isocyanate

Supplemental label

elements

: Repeated exposure may cause skin dryness or cracking.

Contains isocyanates. May produce an allergic reaction. FOR INDUSTRIAL USE

ONLY

#### **Special packaging requirements**

Not applicable.

#### 2.3 Other hazards

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

vPvB.

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of

0.1% or higher.

Other hazards which do not result in classification

: None known.

# **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
Hexamethylene Diisocyanate Polymer	EC: 500-060-2 CAS: 28182-81-2	≥50 - ≤75	Acute Tox. 4, H332 Skin Sens. 1, H317 STOT SE 3, H335	ATE [Inhalation (dusts and mists)] = 4.625 mg/l	[1]
n-Butyl Acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≥25 - ≤50	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	-	[1] [2]
Hexamethylene Diisocyanate (max.)	REACH #: 01-2119457571-37	≤0.3	Acute Tox. 4, H302 Acute Tox. 1, H330	ATE [Oral] = 500 mg/kg	[1] [2]

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Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II
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# **SECTION 3: Composition/information on ingredients**

EC: 212-485-8 CAS: 822-06-0 ndex: 615-011-00-1	Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335	ATE [Inhalation (dusts and mists)] = 0.005 mg/l Resp. Sens. 1, H334: $C \ge 0.5\%$ Skin Sens. 1, H317: $C \ge 0.5\%$	
	See Section 16 for the full text of the H statements declared above.	0 - 0.070	

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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

#### Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

# **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 unconscious, place in recovery

position and seek medical advice.

*Eye contact* : Remove contact lenses, irrigate copiously with clean, fresh water, holding the

eyelids apart for at least 10 minutes and seek immediate medical advice.

**Inhalation**: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by

trained personnel.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and

water or use recognized skin cleanser. Do NOT use solvents or thinners.

If swallowed, seek medical advice immediately and show this container or label.

Keep person warm and at rest. Do NOT induce vomiting.

**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. Wash contaminated clothing

thoroughly with water before removing it, or wear gloves.

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

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit 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. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitization of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability.

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#### SECTION 4: First aid measures

Repeated or prolonged contact with irritants may cause dermatitis.

Contains Hexamethylene Diisocyanate Polymer, hexamethylene-di-isocyanate. May produce an allergic reaction.

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

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

See toxicological information (Section 11)

# SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing

media

: Recommended: alcohol-resistant foam, CO<sub>2</sub>, powders, water spray or mist.

Unsuitable extinguishing

media

: Do not use water jet.

#### 5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Fire will produce dense black smoke. Exposure to decomposition products may

cause a health hazard.

Hazardous combustion

products

: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen, hydrogen cyanide, monomeric

isocyanates.

## 5.3 Advice for firefighters

Special protective actions

for fire-fighters

: Cool closed containers exposed to fire with water. Do not release runoff from fire to

drains or watercourses.

Special protective equipment for fire-fighters : Fire-fighters should wear positive pressure self-contained breathing apparatus

(SCBA) and full turnout gear.

# SECTION 6: Accidental release measures

# 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: Exclude sources of ignition and ventilate the area. Avoid breathing vapor or mist.

Refer to protective measures listed in sections 7 and 8.

Keep unnecessary and unprotected personnel from entering.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the

information in "For non-emergency personnel".

6.2 Environmental precautions

: Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local

regulations.

6.3 Methods and materials for containment and cleaning up

: 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). Place in a suitable container. The contaminated area should be cleaned immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises (by volume): water (45 parts), ethanol or isopropyl alcohol (50 parts) and concentrated (d: 0,880) ammonia solution (5 parts). A non-flammable alternative is sodium carbonate (5 parts) and water (95 parts). Add the same decontaminant to the remnants and let stand for

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#### **SECTION 6: Accidental release measures**

several days until no further reaction in an unsealed container. Once this stage is reached, close container and dispose of according to local regulations (see section 13).

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**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used.

# Examination of lung function should be carried out on a regular basis on persons spraying this mixture.

# 7.1 Precautions for safe handling

: 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 only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Care should be taken when re-opening partly-used containers. Precautions should be taken to minimize exposure to atmospheric humidity or water. CO<sub>2</sub> will be formed, which, in closed containers, could result in pressurization. Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws. Do not allow to enter drains or watercourses.

Information on fire and explosion protection

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air.

# 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

#### Notes on joint storage

Keep away from: oxidizing agents, strong alkalis, strong acids.

# Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight.

Keep container tightly closed.

Keep away from sources of ignition. No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Contaminated absorbent material may pose the same hazard as the spilled product.

#### 7.3 Specific end use(s)

**Recommendations**: Not available.

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# **SECTION 7: Handling and storage**

Industrial sector specific solutions

: Not available.

Good housekeeping standards, regular safe removal of waste materials and regular maintenance of spray booth filters will minimise the risks of spontaneous combustion and other fire hazards.

Before use of this material please refer to the Exposure Scenario(s) if attached for the specific end use, control measures and additional PPE considerations.

# **SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
n-Butyl Acetate	Working Environment Authority (Denmark, 6/2022). [Butyl acetate, all isomers]
	TWA: 50 ppm 8 hours.
	TWA: 241 mg/m <sup>3</sup> 8 hours.
	STEL: 723 mg/m³ 15 minutes.
	STEL: 150 ppm 15 minutes.
Hexamethylene Diisocyanate (max.)	Working Environment Authority (Denmark, 6/2022).
• • • • •	TWA: 0.005 ppm 8 hours.
	TWA: 0.035 mg/m <sup>3</sup> 8 hours.
	STEL: 0.07 mg/m³ 15 minutes.
	STEL: 0.01 ppm 15 minutes.

#### **Biological exposure indices**

No exposure indices known.

# 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.
- : Regular monitoring of all work areas should be carried out at all times, including areas that may not be equally ventilated.

#### **DNELs/DMELs**

Product/ingredient name	Туре	Exposure	Value	Population	Effects
n-Butyl Acetate	DNEL	Short term Inhalation	600 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	300 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	300 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	35.7 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Dermal	11 mg/kg	Workers	Systemic
	DNEL	•		Workers	Systemic
	DNEL	Long term Dermal	3. 3	General population	Systemic
	DNEL	Short term Dermal	6 mg/kg	General population	Systemic
	DNEL	Long term Oral	2 mg/kg	General	Systemic

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# **SECTION 8: Exposure controls/personal protection**

DI	NEL	Short term Oral	2 mg/kg	population General population	Systemic
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#### **PNECs**

Product/ingredient name	Compartment Detail	Value	Method Detail
	Marine water Fresh water sediment	0.18 mg/l 0.018 mg/l 0.981 mg/kg 0.0981 mg/kg	-
	Soil	0.0903 mg/kg 35.6 mg/l	-

#### 8.2 Exposure controls

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be exposed to any process in which this product is used.

Examination of lung function should be carried out on a regular basis on persons spraying this mixture.

Appropriate engineering controls

- : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. Air-fed protective respiratory equipment must be worn by the spray operator, even when good ventilation is provided. In other operations, if local exhaust ventilation and good general extraction are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn. (See Occupational exposure controls.)
- : Users are advised to consider national Occupational Exposure Limits or other equivalent values.

#### **Individual protection measures**

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection
Skin protection

: Use safety eyewear designed to protect against splash of liquids.

Hand protection Gloves

- : Wear suitable gloves tested to EN374.
- : Gloves for short term exposure/splash protection (less than 10 min): Nitrile >0.35 mm

Gloves for splash protection need to be changed immediately when in contact with chemicals.

For long term exposure or spills (breakthrough time >480 min): Use PE laminate gloves as under gloves.

Due to many conditions (e.g. temperature, abrasion) the practical usage of a chemical protective glove in practice may be much shorter than the permeation time determined through testing.

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical

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# **SECTION 8: Exposure controls/personal protection**

damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of

use, as included in the user's risk assessment.

: Personnel should wear antistatic clothing made of natural fibers or of high-**Body protection** 

temperature-resistant synthetic fibers.

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity,

wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design

requirements and test methods.

Other skin protection Appropriate footwear and any additional skin protection measures should be

selected based on the task being performed and the risks involved and should be

approved by a specialist before handling this product.

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.

Environmental exposure

controls

: Do not allow to enter drains or watercourses.

Before use of this material please refer to the Exposure Scenario(s) if attached for the specific end use, control measures and additional PPE considerations. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

#### SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

: Not relevant/applicable due to nature of the product.

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

# **Appearance**

Physical state : Liquid. Color Colorless. Odor : Characteristic. Odor threshold : Not available.

: Not relevant/applicable due to nature of the product. pН

insoluble in water.

Melting point/freezing point

Initial boiling point and

boiling range

: 123°C

: Closed cup: 35°C [Pensky-Martens Closed Cup] Flash point

Evaporation rate : 1 (butyl acetate = 1) **Flammability** : Flammable liquid.

Lower and upper explosion

: LEL: 1.38% (n-Butyl Acetate)

UEL: 7.6% (n-Butyl Acetate) limit

: 1.3 kPa (10 mm Hg) Vapor pressure

Relative vapor density : 4 [Air = 1] Relative density : 1.06

Solubility(ies)

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# **SECTION 9: Physical and chemical properties**

Media	Result
cold water	Not soluble

**Partition coefficient:** n-octanol/: Not relevant/applicable due to nature of the product.

Auto-ignition temperature

Ingredient name	°C	°F	Method
n-Butyl Acetate	415	779	

Decomposition temperature

: Not relevant/applicable due to nature of the product.

**Viscosity** 

: Kinematic (40°C): >20.5 mm<sup>2</sup>/s

Explosive properties Oxidizing properties Particle characteristics

Median particle size

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

: Not relevant/applicable due to nature of the product.

9.2 Other information

Heat of combustion : 7.027 kJ/g

# SECTION 10: Stability and reactivity

10.1 Reactivity : The product reacts slowly with water, resulting in the production of carbon dioxide.

10.2 Chemical stability : Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions : In closed containers, pressure buildup could result in distortion, expansion and, in

extreme cases, bursting of the container.

10.4 Conditions to avoid : In a fire, hazardous decomposition products may be produced.

10.5 Incompatible materials : Keep away from: oxidizing agents, strong alkalis, strong acids, amines, alcohols,

water. Uncontrolled exothermic reactions occur with amines and alcohols.

10.6 Hazardous decomposition products : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen, hydrogen cyanide, monomeric

isocyanates.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

# **SECTION 11: Toxicological information**

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

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit 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. Symptoms and signs include headache, dizziness, fatique, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in nonallergic contact dermatitis and absorption through the skin. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation

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# **SECTION 11: Toxicological information**

and dermal routes of exposure and eye contact.

Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitization of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability. Repeated or prolonged contact with irritants may cause dermatitis.

Contains Hexamethylene Diisocyanate Polymer, hexamethylene-di-isocyanate. May produce an allergic reaction.

# **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Hexamethylene Diisocyanate Polymer	LC50 Inhalation Dusts and mists	Rat	18500 mg/m³	1 hours
n-Butyl Acetate	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
Hexamethylene Diisocyanate (max.)	LC50 Inhalation Dusts and mists	Rat	124 mg/m³	4 hours

# **Acute toxicity estimates**

Route	ATE value
Inhalation (dusts and mists)	1.35 mg/l

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Hexamethylene	Eyes - Moderate irritant	Rabbit	-	100	-
Diisocyanate Polymer				milligrams	
	Skin - Moderate irritant	Rabbit	-	500	-
				milligrams	
n-Butyl Acetate	Eyes - Moderate irritant	Rabbit	-	100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	

Conclusion/Summary

**Conclusion/Summary** 

: Not available.

**Sensitization** 

No data available

: Not available.

**Mutagenicity** 

No data available

**Carcinogenicity** 

No data available

Reproductive toxicity

No data available

**Teratogenicity** 

No data available

Specific target organ toxicity (single exposure)

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# **SECTION 11: Toxicological information**

Product/ingredient name	Category	Route of exposure	Target organs
Hexamethylene Diisocyanate Polymer n-Butyl Acetate	Category 3 Category 3	-	Respiratory tract irritation Narcotic effects
Hexamethylene Diisocyanate (max.)	Category 3	-	Respiratory tract irritation

# Specific target organ toxicity (repeated exposure)

No data available

#### **Aspiration hazard**

No data available

#### 11.2 Information on other hazards

# 11.2.1 Endocrine disrupting properties

Not available.

#### 11.2.2 Other information

Not available.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

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

Product/ingredient name	Result	Species	Exposure
n-Butyl Acetate	<b>3</b> .	Crustaceans - Artemia salina Fish - Pimephales promelas	48 hours \ 96 hours

# 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
No data available				

**Conclusion/Summary**: Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-Butyl Acetate	-	-	Readily

# 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Hexamethylene Diisocyanate (max.)	-	57.63	Low

# 12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility

: Not available.

#### 12.5 Results of PBT and vPvB assessment

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# **SECTION 12: Ecological information**

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

# 12.6 Endocrine disrupting properties

Not available.

#### 12.7 Other adverse effects

No known significant effects or critical hazards.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

Methods of disposal

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste

: Yes.

European waste catalogue (EWC)

: waste isocyanates 08 05 01\*

Disposal considerations

: Do not allow to enter drains or watercourses. Residues in empty containers should

be neutralized with a decontaminant (see section 6).

Dispose of according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no

longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

#### **Packaging**

Methods of disposal

: 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.

Disposal considerations

: Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.

European waste catalogue (EWC)

 packaging containing residues of or contaminated by hazardous substances 15 01 10\*

Special precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

# **SECTION 14: Transport information**

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# **SECTION 14: Transport information**

	ADR/RID	IMDG	IATA
14.1 UN number or ID number	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT
14.3 Transport Hazard Class(es)/ Label(s)	3	3	3
14.4 Packing group	III	III	III
14.5 Environmental hazards	No.	No.	No.
Additional information	Tunnel code D/E	Emergency schedules F-E, S-E	-

user

14.6 Special precautions for : 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

: Not applicable.

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

#### **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

## **Annex XIV**

None of the components are listed.

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

Product/ingredient name	%	Designation [Usage]
Envirolastic 2500 - Additive	≥90	3
hexamethylene-di-isocyanate	≤0.3	74

Labeling : As from August 24 2023 adequate training is required before industrial or professional use.

Training advice www.safeusediisocyanates.eu.

Other EU regulations

VOC content (2010/75/EU) : 25 w/w 264 g/l

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# **SECTION 15: Regulatory information**

**Explosive precursors** 

: Not applicable.

#### Seveso Directive

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

# **National regulations**

Danish fire class : II-1 MAL-code 93 : 5-5

Protection based on MAL : According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:

> **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. A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

> In all spraying operations in which there is return spray, the following must be worn: respiratory protection and arm protectors/apron/coveralls/protective clothing as appropriate or as instructed.

MAL-code: 5-5

Application: When using scraper or knife, brush, roller etc. for pre- and posttreatments in a spray booth where the operator is outside the spray zone and when working in similar new\* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When spraying in new\* booths and cabins with non-atomizing guns.

- Protective clothing must be worn.

During non-atomizing spraying in existing\* facilities of the combined-cabin, spraycabin and spray-booth type where the operator is working inside the spray zone. When spraying in existing\* spray booths, if the operator is outside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments in cabins or booths of the existing\* facility type, if the operator is inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin. During downtimes, cleaning and repair of closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents.

- Air-supplied full mask and protective clothing must be worn.

When spraying in new\* booths if the operator is outside the spray zone.

- Air-supplied full mask must be worn.

During all spraying where atomization occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.

- Air-supplied full mask, protective clothing and hood must be worn.

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# **SECTION 15: Regulatory information**

**Drying:** Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc. must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.

**Polishing:** When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.

**Caution** The regulations contain other stipulations in addition to the above.

\*See Regulations.

Restrictions on use : Not to be used by professional users below 18 years of age. See the National

Working Environment Authorities Executive Order regarding Young People At Work.

15.2 Chemical Safety Assessment

: No Chemical Safety Assessment has been carried out.

#### **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

vPvB = Very Persistent and Very Bioaccumulative

N/A = Not available

Key literature references and sources for data

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

ADR = The European Agreement concerning the International Carriage of

Dangerous Goods by Road

IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by

Commission Regulation (EU) 2020/878

Directive 2012/18/EU, and relative amendments & additions Directive 2008/98/EC, and relative amendments & additions Directive 2009/161/EU, and relative amendments & additions

**CEPE** Guidelines

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

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Acute Tox. 4, H332	Calculation method
Skin Sens. 1, H317	Calculation method
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method

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#### **SECTION 16: Other information**

Full text of abbreviated H	: H226	Flammable liquid and vapor.
statements	H302	Harmful if swallowed.
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H319	Causes serious eye irritation.
	H330	Fatal 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.
	EUH066	Repeated exposure may cause skin dryness or cracking.
Full text of classifications [CLP/GHS]	: Acute Tox. 1 Acute Tox. 4 Eye Irrit. 2 Flam. Liq. 3 Resp. Sens. 1 Skin Irrit. 2 Skin Sens. 1 STOT SE 3	ACUTE TOXICITY - Category 1 ACUTE TOXICITY - Category 4 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 3 RESPIRATORY SENSITIZATION - Category 1 SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

Date of printing : 24, Sep, 2023.

Date of issue/ Date of

revision

: 24, Sep, 2023

Date of previous issue : 17, Jun, 2023

: If there is no previous validation date please contact your supplier for more

information.

Version : 3.02

#### **Notice to reader**

In accordance with Regulation (EC) 1907/2006, REACH Regulation, Articles 31, 37, any required hazard-related information on the use of substances received as downstream user will be sent forward. Consequently, the safety data sheets for some products will contain a SUMI - Safe Use of Mixture Information - attached to the safety data sheet.

SUMI(s) will be added to the SDS for products if both the following conditions are met:

- The product is classified as hazardous for health
- The product contains one or more REACH-registered substances for which extended safety data sheets (exposure scenarios) have been provided

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

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