# **SAFETY DATA SHEET**

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

1.1 Product identifier

Product name : PU HARDENER NON YELLOWING

Product code : TH0790/00

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 Italy S.r.I. Via del Fiffo, 12 - 40065 Pianoro (BO)

Italia - C.P. 18

Cod. Fisc. e Reg. Impr. Bo 08866930152

e-mail address of person : regulatory.SWI@sherwin.com

responsible for this SDS

1.4 Emergency telephone number

National advisory body/Poison Centre

**Telephone number** : +353 1 809 2166

**Supplier** 

**Telephone number** : +39 051 770511

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. 2, H225 Eye Irrit. 2, H319 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.

2.2 Label elements

Hazard pictograms





Signal word : Danger

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#### SECTION 2: Hazards identification

**Hazard statements**: Highly flammable liquid and vapour.

Causes serious eye irritation.
May cause an allergic skin reaction.
May cause respiratory irritation.
May cause drowsiness or dizziness.

**Precautionary statements** 

Prevention: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot

surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.

Response : IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF

ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water or shower.

**Storage** : Keep cool.

Disposal : Dispose of contents and container in accordance with all local, regional, national

and international regulations.

Hazardous ingredients : Hexamethylene Diisocyanate Polymer

Methyl Ethyl Ketone n-Butyl Acetate

Supplemental label

elements

: Contains isocyanates. May produce an allergic reaction. Repeated exposure may

cause skin dryness or cracking. FOR INDUSTRIAL USE ONLY

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

**Special packaging requirements** 

Not applicable.

#### 2.3 Other hazards

Other hazards which do not result in classification

: None known.

# SECTION 3: Composition/information on ingredients

#### 3.2 Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
Isobutyl Acetate	REACH #: 01-2119488970-22 EC: 203-745-1 CAS: 110-19-0 Index: 607-026-00-7	≥25 - ≤50	Flam. Liq. 2, H225 EUH066	[1] [2]
Hexamethylene Diisocyanate Polymer	REACH #: 01-2119485796-17 EC: 500-060-2 CAS: 28182-81-2	≥25 - ≤50	Acute Tox. 4, H332 Skin Sens. 1, H317 STOT SE 3, H335	[1] [2]
Methyl Ethyl Ketone	REACH #: 01-2119457290-43 EC: 201-159-0 CAS: 78-93-3 Index: 606-002-00-3	≥10 - <20	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[1] [2]
n-Butyl Acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4	≤10	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	[1] [2]

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

Index: 607-025-00-1

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, are PBTs or vPvBs 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
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

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 recognised skin cleanser. Do NOT use solvents or thinners.

If swallowed, seek medical advice immediately and show the 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 vapour 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. 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.

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

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.

Contains Hexamethylene diisocyanate, oligomers. 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.

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#### **SECTION 4: First aid measures**

See toxicological information (Section 11)

# SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing

media

: Recommended: alcohol-resistant foam, carbon dioxide, powders.

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.

# 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

Due to the organic solvents content of the mixture:

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

For non-emergency personnel

: Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.

Keep unnecessary and unprotected personnel from entering.

For emergency responders: If specialised 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 material 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). Preferably clean with a detergent.

6.4 Reference to other sections

Avoid using solvents. 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).

#### 7.1 Precautions for safe handling

: Due to the organic solvents content of the mixture:

Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour 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.

Keep away from heat, sparks and flame. No sparking tools should be used.

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# **SECTION 7: Handling and storage**

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.

Information on fire and explosion protection

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

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

# 7.2 Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations.

### Notes on joint storage

Keep away from: oxidising 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 unauthorised 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 spilt product.

#### 7.3 Specific end use(s)

**Recommendations** : Not available. **Industrial sector specific** : Not available.

solutions

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**

Isobutyl Acetate	NAOSH (Ireland, 3/2016).	
	OELV-8hr: 150 ppm 8 hours. OELV-8hr: 700 mg/m³ 8 hours.	
Hexamethylene Diisocyanate Polymer	NAOSH (Ireland, 3/2016). Skin sensitiser.	
Trexametrylene biloocyanate i olymer	OELV-8hr: 0.02 mg/m³, (as NCO) 8 hours.	
	OELV-15min: 0.07 mg/m³, (as NCO) 15 minutes.	
Methyl Ethyl Ketone	NAOSH (Ireland, 3/2016). Absorbed through skin.	
	OELV-8hr: 200 ppm 8 hours.	
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# SECTION 8: Exposure controls/personal protection

OELV-8hr: 600 mg/m³ 8 hours.
OELV-15min: 300 ppm 15 minutes.
OELV-15min: 900 mg/m³ 15 minutes.

NAOSH (Ireland, 3/2016).
OELV-8hr: 150 ppm 8 hours.
OELV-8hr: 710 mg/m³ 8 hours.
OELV-15min: 200 ppm 15 minutes.
OELV-15min: 950 mg/m³ 15 minutes.

# Recommended monitoring procedures

- : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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	Type	Exposure	Value	Population	Effects
Hexamethylene Diisocyanate Polymer	DNEL	Long term Inhalation	0.5 mg/m³	Workers	Local
	DNEL	Short term Inhalation	1 mg/m³	Workers	Local
Methyl Ethyl Ketone	DNEL	Long term Dermal	1161 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	600 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	412 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	106 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Oral	31 mg/kg bw/day	Consumers	Systemic
n-Butyl Acetate	DNEL	Short term Inhalation	960 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Inhalation	960 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	480 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	480 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	859.7 mg/ m³	Consumers	Systemic
	DNEL	Short term Inhalation	859.7 mg/ m³	Consumers	Local
	DNEL	Long term Inhalation	102.34 mg/ m³	Consumers	Systemic
	DNEL	Long term Inhalation	102.34 mg/ m³	Consumers	Local

#### **PNECs**

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# SECTION 8: Exposure controls/personal protection

Product/ingredient name	Compartment Detail	Value	Method Detail
Hexamethylene Diisocyanate Polymer	Fresh water	0.127 mg/l	-
	Fresh water sediment	266700 mg/kg	-
	Marine water	0.0127 mg/l	-
	Marine water sediment	26670 mg/kg	-
	Sewage Treatment	38.3 mg/l	-
	Plant		
	Soil	53182 mg/kg dwt	-
Methyl Ethyl Ketone	Fresh water	55.8 mg/l	-
		55.8 mg/l	-
	1	709 mg/l	-
	Plant		
		284.7 mg/kg dwt	-
		22.5 mg/kg	-
	Secondary Poisoning	1000 mg/kg	-
n-Butyl Acetate	Fresh water	0.18 mg/l	-
		0.018 mg/l	-
		0.981 mg/kg	-
		0.0981 mg/kg	-
		0.0903 mg/kg	-
		35.6 mg/l	-
	Plant		

#### 8.2 Exposure controls

# Appropriate engineering controls

- : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.
- : 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 Hand protection Gloves

- : Use safety eyewear designed to protect against splash of liquids.
- : Wear suitable gloves tested to EN374.
- : Short Term Exposure less than 10 minutes Continuous use Nitrile gloves.

  Long Term Exposure Spill / For prolonged or repeated handling, use PE / PE
  Laminate gloves > 8 hours (breakthrough time).

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 material.

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 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.

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# SECTION 8: Exposure controls/personal protection

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.

**Body protection** : Personnel should wear protective clothing.

> : 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.

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

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

approved by a specialist before handling this product.

: Use a properly fitted, particulate filter respirator complying with an approved Respiratory protection

standard if a risk assessment indicates this is necessary. Recommended: A2P2 (EN14387). 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**

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

**Appearance** 

Physical state : Liquid.

Colour : Not available.

: Paint Odour

Odour threshold : Not Available (Not Tested). pН : Not Available (Not Tested).

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

Initial boiling point and

boiling range

: 78°C

Flash point : Closed cup: 11°C [Pensky-Martens Closed Cup]

Evaporation rate : 5.6 (butyl acetate = 1)

: Not relevant/applicable due to nature of the product. Flammability (solid, gas)

Upper/lower flammability or

explosive limits

: Lower: 1.3% Upper: 10%

Vapour pressure : 1.6 kPa [at 20°C] : 2.48 [Air = 1] Vapour density

Relative density

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

water

Auto-ignition temperature : Not Available (Not Tested).

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

Viscosity : Kinematic (40°C): <0.205 cm<sup>2</sup>/s

**Explosive properties** 

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

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

9.2 Other information

Heat of combustion : 18.65 kJ/g

# 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 : Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions

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

10.4 Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition

products.

10.5 Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions:

oxidising agents, strong alkalis, strong acids.

10.6 Hazardous decomposition products

: Decomposition products may include the following materials: carbon monoxide,

carbon dioxide, smoke, oxides of nitrogen.

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 toxicological effects

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 vapour 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. 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.

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

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.

Contains Hexamethylene diisocyanate, oligomers. May produce an allergic reaction.

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Isobutyl Acetate	LD50 Dermal	Rabbit	>17400 mg/kg	-
	LD50 Oral	Rat	13400 mg/kg	-
Hexamethylene	LC50 Inhalation Vapour	Rat	18500 mg/m <sup>3</sup>	1 hours
Diisocyanate Polymer	•			
Methyl Ethyl Ketone	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-
n-Butyl Acetate	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-

#### **Acute toxicity estimates**

Route	ATE value
Inhalation (vapours)	30.62 mg/l

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: Not available.

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# **SECTION 11: Toxicological information**

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Isobutyl Acetate	Eyes - Moderate irritant	Rabbit	-	24 hours 500	-
				milligrams	
	Skin - Mild irritant	Rabbit	-	500	-
	Skin - Moderate irritant	Rabbit	_	milligrams 24 hours 500	
	Skiii - Moderate iiritarit	IXabbit		milligrams	_
Hexamethylene	Eyes - Moderate irritant	Rabbit	_	100	-
Diisocyanate Polymer				milligrams	
	Skin - Moderate irritant	Rabbit	-	500	-
Mothyd Ethyd Kotono	Chin Mild irritant	Dobbit		milligrams	
Methyl Ethyl Ketone	Skin - Mild irritant	Rabbit	-	24 hours 14 milligrams	-
	Skin - Moderate irritant	Rabbit	_	24 hours 500	_
				milligrams	
n-Butyl Acetate	Eyes - Moderate irritant	Rabbit	-	100	-
		D 11.11		milligrams	
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
				Illilligrailis	

Conclusion/Summary

Sensitisation

No data available

Conclusion/Summary

Respiratory

: Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitisation of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. These symptoms may also be delayed and can occur several hours after exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

#### **Mutagenicity**

No data available

# **Carcinogenicity**

No data available

#### Reproductive toxicity

No data available

# **Teratogenicity**

No data available

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

Product/ingredient name	Category	Route of exposure	Target organs
Hexamethylene Diisocyanate Polymer	Category 3	Not applicable.	Respiratory tract \(\sqrt{irritation}\)
Methyl Ethyl Ketone n-Butyl Acetate	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Narcotic effects

# Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
No data available			_

#### **Aspiration hazard**

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# **SECTION 11: Toxicological information**

Product/ingredient i	name Result	
No data available		

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
Methyl Ethyl Ketone	, 0	Algae - Skeletonema costatum Daphnia - Daphnia magna -	96 hours \ 48 hours
n-Butyl Acetate	Acute LC50 3220000 µg/l Fresh water Acute LC50 32 mg/l Marine water Acute LC50 18000 µg/l Fresh water	Larvae Fish - Pimephales promelas Crustaceans - Artemia salina Fish - Pimephales promelas	96 hours 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
Methyl Ethyl Ketone	-	-	Readily
n-Butyl Acetate	-	-	Readily

#### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Hexamethylene Diisocyanate Polymer	-	367.7	low

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

*Mobility* : Not available.

#### 12.5 Results of PBT and vPvB assessment

PBT : Not applicable.vPvB : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains

and sewers.

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# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

# **Product**

Methods of disposal

: The generation of waste should be avoided or minimised 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

European waste catalogue (EWC)

: Yes.

: waste paint and varnish containing organic solvents or other hazardous substances

08 01 11\*

Disposal considerations

Do not allow to enter drains or watercourses.

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 minimised 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. Vapour 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

# **SECTION 14: Transport information**

	ADR/RID	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
14.3 Transport Hazard Class(es)/ Label(s)	3	3	3
14.4 Packing group	II	II	II
14.5 Environmental hazards	No.	No.	No.

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Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II PU HARDENER NON YELLOWING TH0790/00

# **SECTION 14: Transport information**

Additional	Special provisions	Emergency schedules	-
information	640 (C)	( <u>EmS)</u>	
		F-E, S-E	
	Tunnel code		
	(D/E)		

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 Transport in bulk according to Annex II of Marpol and the IBC Code : 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 authorisation

#### **Annex XIV**

None of the components are listed.

**Annex XVII - Restrictions**: Not applicable.

on the manufacture. placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

VOC content (2010/75/EU) : 64 w/w

600 **g/I** 

### **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.

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

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

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) 2015/830

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. 2, H225	On basis of test data
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method

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

information.

Version : 4.01

#### Notice to reader

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 Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. 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 or local laws. The conditions for use of the product are not under the control of the manufacturer, therefore the customer/buyer/ user is responsible for determining 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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