# SAFETY DATA SHEET



Date of issue/Date of revision 14 June 2020

Version 14

# **Section 1. Identification**

Product name : HIGH SOLIDS HARDENER

Product code : F3260

Other means of

identification

: Not available.

Product type : Liquid.

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

Product use : Industrial applications, Used by spraying.

Use of the substance/

mixture

: Hardener.

Uses advised against : Not applicable.

Manufacturer : PPG Industries, Inc.

One PPG Place, Pittsburgh, PA 15272

Emergency telephone : (412) 434-4515 (U.S.)
number (514) 645-1320 (Canada)

SETIQ Interior de la República: 800-00-214-00 (México) SETIQ Ciudad de México: (55) 5559-1588 (México)

Technical Phone Number : 1-800-647-6050

### Section 2. Hazards identification

**OSHA/HCS** status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 RESPIRATORY SENSITIZATION - Category 1

SKIN SENSITIZATION - Category 1

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

**GHS label elements** 

Hazard pictograms :







Signal word : Danger

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### **Product name HIGH SOLIDS HARDENER**

### Section 2. Hazards identification

**Hazard statements** 

: Flammable liquid and vapor.

May cause an allergic skin reaction.

Harmful if inhaled.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause respiratory irritation.

#### **Precautionary statements**

**Prevention** 

: Wear protective gloves. Wear protective clothing. Wear eye or face protection. Wear respiratory protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing vapor.

Response

: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. If experiencing respiratory symptoms: Call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water.

Storage Disposal : Store in a well-ventilated place. Keep container tightly closed. Keep cool.

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

: Moisture-sensitive material. Skin contact to isocyanate monomer may lead to allergic lung reaction. 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. Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated.

Hazards not otherwise classified

: Prolonged or repeated contact may dry skin and cause irritation.

# Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product name : HIGH SOLIDS HARDENER

Ingredient name	%	CAS number
Hexamethylene diisocyanate, oligomers.	≥75 - ≤90	28182-81-2
n-butyl acetate	≥10 - <20	123-86-4
hexamethylene-di-isocyanate	<1.0	822-06-0

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

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

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### **Product name HIGH SOLIDS HARDENER**

### Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

### **Description of necessary first aid measures**

**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.

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

person warm and at rest. Do NOT induce vomiting.

### Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

Inhalation : Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma

symptoms or breathing difficulties if inhaled.

**Skin contact**: Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin

reaction.

**Ingestion**: No known significant effects or critical hazards.

### Over-exposure signs/symptoms

Eye contact : No specific data.

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

coughing

wheezing and breathing difficulties

asthma

**Skin contact**: Adverse symptoms may include the following:

irritation redness dryness cracking

Ingestion : No specific data.

#### Indication of immediate medical attention and special treatment needed, if necessary

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.

**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.

#### See toxicological information (Section 11)

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### **Product name HIGH SOLIDS HARDENER**

### Section 5. Fire-fighting measures

### **Extinguishing media**

Suitable extinguishing

media

**Unsuitable extinguishing** 

media

: Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

: Do not use water jet.

Specific hazards arising from the chemical

: Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

carbon oxides nitrogen oxides

Cyanate and isocyanate. hydrogen cyanide

Special protective actions for fire-fighters

: 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Section 6. Accidental release measures

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

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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".

**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).

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

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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**Product name HIGH SOLIDS HARDENER** 

### Section 6. Accidental release measures

#### Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

#### **Special provisions**

: 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 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). 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.

### Section 7. Handling and storage

### **Precautions for safe handling**

#### **Protective measures**

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

### Special precautions

: Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

# Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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#### **Product name HIGH SOLIDS HARDENER**

# Section 7. Handling and storage

including any incompatibilities

Conditions for safe storage, : Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

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.

# Section 8. Exposure controls/personal protection

### **Control parameters**

#### **Occupational exposure limits**

Ingredient name	Exposure limits
Hexamethylene diisocyanate, oligomers.	IPEL (PPG).
	TWA: 0.5 mg/m <sup>3</sup>
	STEL: 1 mg/m³
n-butyl acetate	OSHA PEL (United States, 5/2018).
	TWA: 710 mg/m³ 8 hours.
	TWA: 150 ppm 8 hours.
	ACGIH TLV (United States, 3/2019).
	STEL: 150 ppm 15 minutes.
	TWA: 50 ppm 8 hours.
hexamethylene-di-isocyanate	ACGIH TLV (United States, 3/2019).
	TWA: 0.03 mg/m <sup>3</sup> 8 hours.
	TWA: 0.005 ppm 8 hours.
	OSHA PEL (United States, 5/2018).
	Absorbed through skin.
	TWA: 5 mg/m³, (as CN) 8 hours.

#### Key to abbreviations

Α	= Acceptable Maximum Peak	S	<ul> <li>Potential skin absorption</li> </ul>
<b>ACGIH</b>	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
С	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	<ul> <li>Short term Exposure limit values</li> </ul>
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

#### Consult local authorities for acceptable exposure limits.

# procedures

**Recommended monitoring**: 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 appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

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**Product name HIGH SOLIDS HARDENER** 

### Section 8. Exposure controls/personal protection

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**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.

### **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 : Safety glasses with side shields.

**Hand protection** 

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves
Body protection

: butyl rubber

: 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 antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

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

By spraying: air-fed respirator. By other operations than spraying, in well ventilated areas, air-fed respirators could be replaced by a combination charcoal filter and particulate filter mask. 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.

Restrictions on use

: 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.

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### **Product name HIGH SOLIDS HARDENER**

### Section 9. Physical and chemical properties

**Appearance** 

**Physical state** : Liquid. Color : Clear.

Odor : Not available. : Not available. **Odor threshold** : Not available. рH **Melting point** : Not available.

**Boiling point** : >37.78°C (>100°F)

Flash point : Closed cup: 26.67°C (80°F)

**Auto-ignition temperature** : Not available. **Decomposition temperature** : Not available. : Not available. Flammability (solid, gas) Lower and upper explosive : Not available.

(flammable) limits

**Evaporation rate** : Not available. Vapor pressure : Not available. Vapor density : Not available.

Relative density 1.09 9.1 Density (lbs/gal) Bulk Density (g/cm³) : 1.107

: Partially soluble in the following materials: cold water. Solubility

Partition coefficient: n-

octanol/water

Not available.

**Viscosity** : Kinematic (40°C (104°F)): >0.21 cm<sup>2</sup>/s (>21 cSt)

: 18% (v/v), 14.5% (w/w) **Volatility** 

% Solid. (w/w) : 85.5

### Section 10. Stability and reactivity

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

**Chemical stability** : The product is stable.

Possibility of hazardous

reactions

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

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

Refer to protective measures listed in sections 7 and 8.

**Incompatible materials** : Keep away from: oxidizing agents, strong alkalis, strong acids, amines, alcohols, water.

Uncontrolled exothermic reactions occur with amines and alcohols.

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**Product name HIGH SOLIDS HARDENER** 

## Section 10. Stability and reactivity

Hazardous decomposition products

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

# Section 11. Toxicological information

### Information on toxicological effects

### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Hexamethylene diisocyanate,	LD50 Dermal	Rabbit	>2000 mg/kg	-
oligomers.				
_	LD50 Oral	Rat - Female	>2500 mg/kg	-
n-butyl acetate	LC50 Inhalation Vapor	Rat	>21.1 mg/l	4 hours
•	LC50 Inhalation Vapor	Rat	2000 ppm	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10.768 g/kg	-
hexamethylene-di-isocyanate	LC50 Inhalation Dusts and mists	Rat	124 mg/m <sup>3</sup>	4 hours
,	LC50 Inhalation Vapor	Rat	151 mg/m³	4 hours
	LC50 Inhalation Vapor	Rat	22 ppm	4 hours
	LD50 Dermal	Rabbit	0.57 g/kg	-
	LD50 Oral	Rat	0.71 g/kg	-

**Conclusion/Summary** 

: There are no data available on the mixture itself.

**Irritation/Corrosion** 

**Conclusion/Summary** 

Skin: There are no data available on the mixture itself.Eyes: There are no data available on the mixture itself.Respiratory: There are no data available on the mixture itself.

**Sensitization** 

**Conclusion/Summary** 

Skin: There are no data available on the mixture itself.Respiratory: There are no data available on the mixture itself.

**Mutagenicity** 

**Conclusion/Summary**: There are no data available on the mixture itself.

Carcinogenicity

**Conclusion/Summary**: There are no data available on the mixture itself.

Reproductive toxicity

**Conclusion/Summary**: There are no data available on the mixture itself.

**Teratogenicity** 

**Conclusion/Summary**: There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

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#### **Product name HIGH SOLIDS HARDENER**

## **Section 11. Toxicological information**

Name		Route of exposure	Target organs
Hexamethylene diisocyanate, oligomers.	Category 3		Respiratory tract irritation
n-butyl acetate	Category 3	-	Narcotic effects
hexamethylene-di-isocyanate	Category 3		Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

<u>Target organs</u>: Contains material which causes damage to the following organs: brain.

Contains material which may cause damage to the following organs: upper respiratory

tract, skin, central nervous system (CNS), eye, lens or cornea.

### **Aspiration hazard**

Not available.

### Information on the likely routes of exposure

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

Inhalation : Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma

symptoms or breathing difficulties if inhaled.

Skin contact : Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin

reaction.

**Ingestion**: No known significant effects or critical hazards.

### Over-exposure signs/symptoms

**Eye contact** : No specific data.

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

coughing

wheezing and breathing difficulties

asthma

**Skin contact**: Adverse symptoms may include the following:

irritation redness dryness cracking

Ingestion : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

### **Conclusion/Summary**: There are no data available on the mixture itself. Skin contact to isocyanate monomer

may lead to allergic lung reaction. 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. Repeated exposure may lead to permanent respiratory disability. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. 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.

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### **Product name HIGH SOLIDS HARDENER**

### **Section 11. Toxicological information**

Short term exposure

Potential immediate : There are no data available on the mixture itself.

effects

**Potential delayed effects**: There are no data available on the mixture itself.

Long term exposure

**Potential immediate**: There are no data available on the mixture itself.

effects

Potential delayed effects : There are no data available on the mixture itself.

Potential chronic health effects

General: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or

dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently

exposed to very low levels.

Carcinogenicity: No known significant effects or critical hazards.Mutagenicity: No known significant effects or critical hazards.Teratogenicity: No known significant effects or critical hazards.Developmental effects: No known significant effects or critical hazards.

**Fertility effects**: No known significant effects or critical hazards.

Numerical measures of toxicity

**Acute toxicity estimates** 

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/ I)
HIGH SOLIDS HARDENER	2929.8	2929.8	N/A	12.9	1.8
Hexamethylene diisocyanate, oligomers.	2500	2500	N/A	11	1.5
n-butyl acetate	10768	N/A	N/A	N/A	N/A
hexamethylene-di-isocyanate	710	570	N/A	0.151	0.124

# **Section 12. Ecological information**

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Hexamethylene diisocyanate, oligomers.	,	Algae - scenedesmus subspicatus	72 hours
n-butyl acetate		Daphnia - daphnia magna Fish - Danio rerio (zebra fish) Fish	48 hours 96 hours 96 hours

### Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
n-butyl acetate	TEPA and OECD 301D	83 % - Readily - 28 days	-	-

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### **Product name HIGH SOLIDS HARDENER**

### Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Hexamethylene diisocyanate,	-	-	Not readily
oligomers. n-butyl acetate	-	-	Readily
n-butyl acetate	-	-	Readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Hexamethylene diisocyanate, oligomers.	-	3.2	low
n-butyl acetate hexamethylene-di-isocyanate	1.78 1.08	-	low low

### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

### Section 13. Disposal considerations

### **Disposal methods**

: 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

### 14. Transport information

	DOT	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class (es)	3	3	3
Packing group	III	III	III

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#### **Product name HIGH SOLIDS HARDENER**

### 14. Transport information

Environmental hazards No. No.

Marine pollutant Not applicable. Not applicable. Not applicable.

substances **Product RQ (lbs)** 34603.9 Not applicable. Not applicable.

**RQ** substances (n-butyl acetate) Not applicable. Not applicable.

### **Additional information**

DOT : Package sizes shipped in quantities less than the product reportable quantity are not subject to the

RQ (reportable quantity) transportation requirements.

**IMDG** : None identified. **IATA** : None identified.

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.

Transport in bulk according: Not applicable.

to IMO instruments

## Section 15. Regulatory information

#### **United States**

United States inventory (TSCA 8b): All components are active or exempted.

U.S. Federal regulations

**SARA 302/304** 

**SARA 304 RQ** : Not applicable. **Composition/information on ingredients** 

No products were found.

**SARA 311/312** 

Classification : FLAMMABLE LIQUIDS - Category 3

> ACUTE TOXICITY (inhalation) - Category 4 **RESPIRATORY SENSITIZATION - Category 1**

SKIN SENSITIZATION - Category 1

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3 HNOC - Defatting irritant

**Composition/information on ingredients** 

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### **Product name HIGH SOLIDS HARDENER**

### **Section 15. Regulatory information**

Name	%	Classification
Hexamethylene diisocyanate, oligomers.	≥75 - ≤90	COMBUSTIBLE DUSTS ACUTE TOXICITY (inhalation) - Category 4 SKIN SENSITIZATION - Category 1A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
n-butyl acetate	≥10 - <20	FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 HNOC - Defatting irritant
hexamethylene-di-isocyanate	<1.0	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 1 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A RESPIRATORY SENSITIZATION - Category 1A SKIN SENSITIZATION - Category 1A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

### **Section 16. Other information**

**Hazardous Material Information System (U.S.A.)** 

Health: 3 \* Flammability: 3 Physical hazards: 0

(\*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

Health: 3 Flammability: 3 Instability: 0

Date of previous issue : 6/10/2020
Organization that prepared : EHS

the MSDS

**Key to abbreviations** : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

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**Product name HIGH SOLIDS HARDENER** 

### **Section 16. Other information**

N/A = Not available SGG = Segregation Group UN = United Nations

▼ Indicates information that has changed from previously issued version.

#### **Disclaimer**

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

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