

**Safety Data Sheet**  
Prepared in Accordance with HCS 29  
C.F.R. 1910.1200

**STONHARD****1. Identification of the Substance/Mixture and the Company/Undertaking**

- 1.1 Product Identifier** 6338/ISO **Revision Date:** 10/25/2018  
**Product Name:** GS6 CLEAR FLAT ISO **Supersedes Date:** 06/25/2018
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Hardener for 2 components coatings - Industrial use.
- 1.3 Details of the supplier of the safety data sheet**
- Manufacturer:** Stonhard, Division of StonCor Group, Inc.  
1000 East Park Avenue  
Maple Shade, NJ 08052  
  
+1 856 7797500 (US)
- Datasheet Produced by:** ehs@stonhard.com
- 1.4 Emergency telephone number:** CHEMTREC 1-800-424-9300 (Inside US)  
CHEMTREC +1 703 5273887 (Outside US)

**2. Hazard Identification****2.1 Classification of the substance or mixture**

Acute Toxicity, Inhalation, category 3  
Carcinogenicity, category 1B  
Flammable Liquid, category 3  
Germ Cell Mutagenicity, category 1B  
Respiratory Sensitizer, category 1  
STOT, single exposure, category 3, RTI  
Skin Irritation, category 2  
Skin Sensitizer, category 1

## 2.2 Label elements

### Symbol(s) of Product



### Signal Word

Danger

### Named Chemicals on Label

3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl-isocyanate, hexamethylene diisocyanate, oligomers, CYCLOHEXANE, 5-ISOCYANATO-1-(ISOCYANATOMETHYL)-1,3,3-TRIMETHYL-, HOMOPOLYMER, Solvent naphtha (petroleum), light arom.

### HAZARD STATEMENTS

Flammable Liquid, category 3	H226	Flammable liquid and vapour.
Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Acute Toxicity, Inhalation, category 3	H331	Toxic if inhaled.
Respiratory Sensitizer, category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
Germ Cell Mutagenicity, category 1B	H340-1B	May cause genetic defects.
Carcinogenicity, category 1B	H350-1B	May cause cancer.

### PRECAUTION PHRASES

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P285	In case of inadequate ventilation wear respiratory protection.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308+313	IF exposed or concerned: Get medical advice/attention.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P341	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342+311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P403+233	Store in a well-ventilated place. Keep container tightly closed.

### 2.3 Other hazards

No Information

#### Results of PBT and vPvB assessment:

No information

## 3. Composition/Information On Ingredients

### 3.2 Mixtures

**Hazardous Ingredients**

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>%</u>
28182-81-2	hexamethylene diisocyanate, oligomers	50 - <75
53880-05-0	CYCLOHEXANE, 5-ISOCYANATO-1-(ISOCYANATOMETHYL)-1,3,3-TRIMETHYL-, HOMOPOLYMER	10 - <25
64742-95-6	Solvent naphtha (petroleum), light arom.	2.5 - <10
123-86-4	n-butyl acetate	2.5 - <10
4098-71-9	3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl-isocyanate	0.1 - <1.0

<u>CAS-No.</u>	<u>GHS Symbols</u>	<u>GHS Hazard Statements</u>	<u>M-Factors</u>
28182-81-2	GHS06	H317-331-335	0
53880-05-0	GHS07-GHS08	H302-315-317-332-334	0
64742-95-6	GHS07-GHS08	H304-335-336-340-350	0
123-86-4	GHS02-GHS07	H225-336	0
4098-71-9	GHS06-GHS08-GHS09	H315-317-319-331-334-335-411	0

**Additional Information:** The text for GHS Hazard Statements shown above (if any) is given in Section 16.

**4. First-aid Measures****4.1 Description of First Aid Measures**

**GENERAL NOTES:** When symptoms persist or in all cases of doubt seek medical advice.

**AFTER INHALATION:** Move to fresh air. Consult a physician after significant exposure.

**AFTER SKIN CONTACT:** Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

**AFTER EYE CONTACT:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.

**AFTER INGESTION:** Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

**Self protection of the first aider:**

No action shall be taken involving any personal risk or without suitable training. 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**

Harmful by inhalation. Irritating to eyes. Harmful in contact with skin and if swallowed.

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

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

**5. Fire-fighting Measures****5.1 Extinguishing Media:**

Carbon Dioxide, Dry Chemical, Foam

**FOR SAFETY REASONS NOT TO BE USED:** Alcohol, Alcohol based solutions, any other media not listed above.

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

Flammable.

**5.3 Advice for firefighters**

Flash back possible over considerable distance. In the event of fire, wear self-contained breathing apparatus. Do not use a solid water stream as it may scatter and spread fire. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Water reactive

**6. Accidental Release Measures****6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Use personal protective equipment. Remove all sources of ignition.

**6.2 Environmental precautions**

Do not allow material to contaminate ground water system. Prevent product from entering drains.

**6.3 Methods and material for containment and cleaning up**

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

**6.4 Reference to other sections**

Please refer to disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

**7. Handling and Storage****7.1 Precautions for safe handling**

**INSTRUCTIONS FOR SAFE HANDLING:** Electrical equipment should be protected to the appropriate standard. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapours or spray mist. Keep away from sources of ignition - No smoking.

**PROTECTION AND HYGIENE MEASURES:** Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

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

**CONDITIONS TO AVOID:** Direct sources of heat. Keep from any possible contact with water.

**STORAGE CONDITIONS:** Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

**7.3 Specific end use(s)**

No specific advice for end use available.

**8. Exposure Controls/Personal Protection****8.1 Control parameters****Ingredients with Occupational Exposure Limits (US)**

<u>Name</u>	<u>CAS-No.</u>	<u>ACGIH TWA</u>	<u>ACGIH STEL</u>	<u>ACGIH Ceiling</u>
hexamethylene diisocyanate, oligomers	28182-81-2			
CYCLOHEXANE, 5-ISOCYANATO-1-(ISOCYANATOMETHYL)-1,3,3-TRIMETHYL-, HOMOPOLYMER	53880-05-0			
Solvent naphtha (petroleum), light arom.	64742-95-6	300.0 PPM		
n-butyl acetate	123-86-4	50 PPM	150 PPM	
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl-isocyanate	4098-71-9	0.005 PPM		

<u>Name</u>	<u>CAS-No.</u>	<u>OSHA PEL</u>	<u>OSHA STEL</u>
hexamethylene diisocyanate, oligomers	28182-81-2		
CYCLOHEXANE, 5-ISOCYANATO-1-(ISOCYANATOMETHYL)-1,3,3-TRIMETHYL-, HOMOPOLYMER	53880-05-0		
Solvent naphtha (petroleum), light arom.	64742-95-6	500.0 PPM	
n-butyl acetate	123-86-4	710 MGM3, 150 PPM	950 MGM3, 200 PPM

3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl-isocyanate

4098-71-9

0.005 PPM

0.02 PPM

**FURTHER INFORMATION:** Refer to the regulatory exposure limits for the workforce enforced in each country.

## 8.2 Exposure controls

### Personal Protection

**RESPIRATORY PROTECTION:** Respirator with filter for organic vapor.

**EYE PROTECTION:** Ensure that eyewash stations and safety showers are close to the workstation location. Safety glasses. Safety goggles.

**HAND PROTECTION:** Impervious gloves. Long sleeved clothing. Remove and wash contaminated clothing before re-use.

**OTHER PROTECTIVE EQUIPMENT:** No Information

**ENGINEERING CONTROLS:** Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

<b>Appearance:</b>	Clear
<b>Physical State</b>	Liquid
<b>Odor</b>	Ester-like odor
<b>Odor threshold</b>	Not determined
<b>pH</b>	N/A
<b>Melting point / freezing point (°C)</b>	Not determined
<b>Boiling point/range (°C)</b>	126 - N.D.
<b>Flash Point, (°F / °C)</b>	114F / 46C
<b>Evaporation rate</b>	Not determined
<b>Flammability (solid, gas)</b>	Not determined
<b>Upper/lower flammability or explosive limits</b>	N/A - N/A
<b>Vapour Pressure</b>	1.2 mmHg
<b>Vapour density</b>	Heavier than air
<b>Relative density</b>	Not determined
<b>Solubility in / Miscibility with water</b>	Reacts with water
<b>Partition coefficient: n-octanol/water</b>	Not determined
<b>Auto-ignition temperature (°C)</b>	Not determined
<b>Decomposition temperature (°C)</b>	Not determined
<b>Viscosity</b>	400 cps
<b>Explosive properties</b>	Not applicable
<b>Oxidising properties</b>	Not applicable

### 9.2 Other information

<b>VOC Content g/l:</b>	378
<b>Grams of VOC per liter of coating product as applied (mixture of Part A and Part B) per ASTM D2369 Method E.</b>	
<b>Specific Gravity (g/cm<sup>3</sup>)</b>	1.134

## 10. Stability and Reactivity

### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

### 10.2 Chemical stability

Stable under recommended storage conditions. Risk of ignition.

### 10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

### 10.4 Conditions to avoid

Direct sources of heat. Keep from any possible contact with water.

### 10.5 Incompatible materials

Strong oxidizing agents.

### 10.6 Hazardous decomposition products

Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke.

## 11. Toxicological Information

### 11.1 Information on toxicological effects

#### Acute Toxicity:

Oral LD50: No information

Inhalation LC50: No information

Irritation: No information available.

Corrosivity: No information available.

Sensitization: No information available.

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Toxicity for reproduction: No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested.

Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
28182-81-2	hexamethylene diisocyanate, oligomers	5000 mg/kg, oral, rat	>2000 mg/kg, rabbit	4.625 mg/l 1 hr rat		
53880-05-0	CYCLOHEXANE, 5-ISOCYANATO-1-(ISOCYANATOMETHYL)-1,3,3-TRIMETHYL-, HOMOPOLYMER	>1400 mg/kg, rat			0.000	>5 mg/l, 4h, rat
64742-95-6	Solvent naphtha (petroleum), light arom.	4700 mg/kg, oral, rat	>3480 mg/kg, rabbit	3670 ppm/4 hours, rat, inhalation	0.000	0.000
123-86-4	n-butyl acetate	10760 mg/kg, rat, oral	>5000 mg/kg (rabbit)	23.4 mg/l/4/h (rat)	0.000	0.000

4098-71-9	3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl-isocyanate	5490 mg/kg oral, rat	40 mg/m <sup>3</sup> inhalation, rat (4 hour)	0.000	0.000
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**Additional Information:**

No Information

## 12. Ecological Information

**12.1 Toxicity:**

EC50 48hr (Daphnia):	No information
IC50 72hr (Algae):	No information
LC50 96hr (fish):	No information

**12.2 Persistence and degradability:** No information

**12.3 Bioaccumulative potential:** No information

**12.4 Mobility in soil:** No information

**12.5 Results of PBT and vPvB assessment:** No information

**12.6 Other adverse effects:** No information

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
28182-81-2	hexamethylene diisocyanate, oligomers	127 mg/l	199 mg/l	>100 mg/l
53880-05-0	CYCLOHEXANE, 5-ISOCYANATO-1-(ISOCYANATOMETHYL)-1,3,3-TRIMETHYL-, HOMOPOLYMER	No information	No information	
64742-95-6	Solvent naphtha (petroleum), light arom.	>1 - 10 mg/l	>1 - 10 mg/l	>10-100 mg/l
123-86-4	n-butyl acetate	No information	No information	
4098-71-9	3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl-isocyanate	27 mg/l	No information	>72 mg/l

## 13. Disposal Considerations

**13.1 WASTE TREATMENT METHODS:** Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport Information

14.1	UN number	UN1993
14.2	UN proper shipping name	Flammable liquid, n.o.s.
	Technical name	Aromatic hydrocarbons, N-butyl acetate
14.3	Transport hazard class(es)	3
	Subsidiary shipping hazard	Not applicable
14.4	Packing group	III
14.5	Environmental hazards	Not applicable
14.6	Special precautions for user	Not applicable
	EmS-No.:	F-E, <u>S-E</u>
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Not applicable

## 15. Regulatory Information

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

### U.S. Federal Regulations: As follows -

#### CERCLA - Sara Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Flammable (gases, aerosols, liquids, or solids), Carcinogenicity, Acute Toxicity (any route of exposure), Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Specific target organ toxicity (single or repeated exposure), Germ cell mutagenicity

#### Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the U.S. Superfund Amendment and Reauthorization Act (SARA) of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
n-butyl acetate	123-86-4
Hexamethylene diisocyanate	822-06-0

#### Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

#### U.S. Clean Air Act:

EPA Coating Category:	Industrial Maintenance Coatings
EPA VOC Content Limit (g/l):	450
Product VOC Content (g/l)	378
Thinning Recommendations:	None
Application Recommendations:	For professional use only.

\* As per the federal EPA definition for coating categories in 40 CFR 59.401.

\*\* Grams of VOC per liter of coating product as applied (mixture of Part A and Part B) per ASTM D2369 Method E.



**U.S. State Regulations: As follows -****New Jersey Right-to-Know:**

The following materials are non-hazardous, but are among the top five components in this product.

No NJ Right-To-Know components exist in this product.

**Pennsylvania Right-To-Know**

The following non-hazardous ingredients are present in the product at greater than 3%.

No PA Right-To-Know components exist in this product.

**California Proposition 65:**

No Proposition 65 Chemicals exist in this product.

**International Regulations: As follows -****\* Canadian DSL:**

All chemical ingredients included on inventory or exempt.

**15.2 Chemical Safety Assessment:**

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

**16. Other Information****Text for GHS Hazard Statements shown in Section 3 describing each ingredient:**

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H411	Toxic to aquatic life with long lasting effects.

**Reasons for revision**

Substance and/or Product Properties Changed in Section(s):

- 02 - Hazard Identification
- 08 - Exposure Controls/Personal Protection
- 11 - Toxicological Information

Revision Statement(s) Changed

This Safety Data Sheet (SDS) has been revised to meet updated national hazard communication standards which have adopted the provisions of the UN GHS system. There have been both formatting and content changes based on the GHS classification (if applicable), Please review each section of the SDS for specific changes. This Safety Data Sheet (SDS) has been revised to meet the new EU CLP requirements. There have been both formatting and content changes based on the CLP classification (if applicable), please review each section of the SDS for specific changes.

## List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark;  
 European Union Commission Regulation No. 1907/2006 on REACH as amended within Commission Regulation (EU) 2015/830;  
 European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) and subsequent technical progress adaptations (ATP);  
 EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes".

## Acronym &amp; Abbreviation Key:

CLP	Classification, Labeling & Packaging Regulation
EC	European Commission
EU	European Union
US	United States
CAS	Chemical Abstract Service
EINECS	European Inventory of Existing Chemical Substances
REACH	Registration, Evaluation, Authorization of Chemicals Regulation
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
LTEL	Long term exposure limit
STEL	Short term exposure limit
OEL	Occupational exposure limit
ppm	Parts per million
mg/m <sup>3</sup>	Milligrams per cubic meter
TLV	Threshold Limit Value
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety & Health Administration
PEL	Permissible Exposure Limits
VOC	Volatile organic compounds
g/l	Grams per liter
mg/kg	Milligrams per kilogram
N/A	Not applicable
LD50	Lethal dose at 50%
LC50	Lethal concentration at 50%
EC50	Half maximal effective concentration
IC50	Half maximal inhibitory concentration
PBT	Persistent bioaccumulative toxic chemical
vPvB	Very persistent and very bioaccumulative
EEC	European Economic Community
ADR	International Transport of Dangerous Goods by Road
RID	International Transport of Dangerous Goods by Rail
UN	United Nations
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
MARPOL	International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978
IBC	International Bulk Container
RTI	Respiratory Tract Irritation
NE	Narcotic Effects

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions

and recommendations are not followed.