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## Section 1 - PRODUCT AND COMPANY IDENTIFICATION

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**Material Name**

LiquiSeal Liquid Flashing Resin

**Synonyms**

Waterproofing Resin

**Chemical Family**

Isocyanate

**Product Use**

Waterproofing Resin

**Restrictions on Use**

For industrial use only.

**Manufacturer Information**

Carlisle SynTec

1285 Ritner Highway

Carlisle, PA 17013 USA

Phone: +1-800-479-6832

Emergency Phone #: +1-800-424-9300 (Chemtrec)

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## Section 2 - HAZARDS IDENTIFICATION

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**Classification of the substance or mixture:**



GHS08 Health Hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.  
Skin Sens. 1 H317 May cause an allergic skin reaction.  
STOT SE 3 H335 May cause respiratory irritation.

**Label Elements**

**GHS Label Elements**

This product is classified and labeled according to the Globally Harmonized System (GHS).

## Safety Data Sheet

Material Name: LiquiSeal Liquid Flashing Resin 1.1G

Product #: 330892 – 1.1G

### Signal Word

Danger

### Hazard-determining Components of Labeling

poly(hexamethylene diisocyanate)  
Poly(3-isocyanatomethyl- 3,5,5-trimethylcyclohexylisocyanate)  
hexamethylene-di-isocyanate  
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

### Hazard Statement(s)

Causes serious eye irritation.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.  
May cause respiratory irritation.

### Precautionary Statement(s)

Do not breathe mist/vapours/spray.  
In case of inadequate ventilation wear respiratory protection.  
Wear protective gloves / eye protection / face protection.  
Wash thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Contaminated work clothing must not be allowed out of the workplace.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Specific treatment (see on this label).  
If experiencing respiratory symptoms: Call a poison center/doctor.  
IF INHALED: Call a POISON CENTER/doctor if you feel unwell.  
If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
If skin irritation occurs: Get medical advice/attention.  
If eye irritation persists: Get medical advice/attention.  
If on skin: Wash with plenty of water.  
Take off contaminated clothing and wash it before reuse.  
Store in a well-ventilated place. Keep container tightly closed.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

### WHMIS-symbols:

D1A - Very toxic material causing immediate and serious toxic effects.  
D2A - Very toxic material causing other toxic effects.



### NFPA ratings (scale 0 - 4):



Health = 3  
Fire = 1  
Reactivity = 0

## Safety Data Sheet

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### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

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**Chemical characterization: Mixtures**

**Description:** Mixture of the substances listed below with nonhazardous additions.

Dangerous Components		
28182-81-2	poly(hexamethylene diisocyanate)	60-100%
53880-05-0	Poly(3-isocyanatomethyl- 3,5,5-trimethylcyclohexylisocyanate)	25-30%
822-06-0	hexamethylene-di-isocyanate	≤1%
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	≤1%

**Additional Information:** Exact concentrations are being withheld as trade secrets.

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### Section 4 - FIRST AID MEASURES

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**General Information:**

Symptoms of poisoning may even occur after several hours.

Remove breathing apparatus only after contaminated clothing have been completely removed.

**After Inhalation:**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor if you feel unwell or are experiencing respiratory symptoms.

**After Skin Contact:**

Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or a rash occurs: Get medical advice/attention.

**After Eye Contact:**

Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists get medical advice/attention.

**After Swallowing:**

Rinse mouth, do not induce vomiting, Immediately call a poison center / doctor.

**Most Important Symptoms and Effects, both Acute and Delayed:**

No further relevant information available.

**Indication of any Immediate Medical Attention and Special Treatment needed:**

No further relevant information available.

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## Section 5 - FIRE FIGHTING MEASURES

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### Suitable Extinguishing Agents:

Use fire fighting measures that suit the environment.

### Special Hazards Arising from the Substance or Mixture:

No further relevant information available.

### Protective Equipment:

Mouth respiratory protective device.

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## Section 6 - ACCIDENTAL RELEASE MEASURES

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### Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective clothing.

### Environmental Precautions

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

### Methods and Materials for Containment and Cleaning Up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

### Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protective equipment.

See Section 13 for disposal information.

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## Section 7 - HANDLING AND STORAGE

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### Precautions for Safe Handling

Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.

Prevent formation of aerosols.

### Information about protection against explosions and fires:

Keep respiratory protective device available.

### Storage

#### Requirements to be met by storerooms and receptacles:

No special requirements.

#### Information about storage in one common storage facility:

Not required.

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**Further Information about Storage Conditions:**

Keep receptacle tightly sealed.

**Special End Use(s):**

No further relevant information available.

### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

**Additional information about design of technical systems:** No further data; see item 7.

<b>Component with limit values that require monitoring at the workplace:</b>	
<b>822-06-0 hexamethylene-di-isocyanate</b>	
EL	Long-term value: 0.005 ppm Ceiling limit value: 0.01 ppm S
EV	Long-term value: 0.005 ppm Ceiling limit value: 0.02 ppm
<b>4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate</b>	
EL	Long-term value: 0.005 pp Ceiling limit value: 0.01 ppm S
EV	Long-term value: 0.005 ppm Ceiling limit value: 0.02 ppm

**Additional Information:**

The lists that were valid during the creation were used as basis.

**Personal Protective Equipment**

**General Protective and Hygienic Measures:**

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

**Breathing Equipment:**

Use suitable respiratory protective device in case of insufficient ventilation.

**Protection of Hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

## Safety Data Sheet

**Material Name:** LiquiSeal Liquid Flashing Resin 1.1G

**Product #:** 330892 – 1.1G

**Material of Gloves:**

Nitrile rubber, NBR

Butyl rubber, BR

Neoprene gloves

**Eye Protection**



Tightly sealed goggles.

### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Form</b>	Liquid	<b>Color</b>	Transparent
<b>Odor</b>	Nearly odorless	<b>Odour threshold</b>	Not determined
<b>pH-value</b>	Not determined	<b>Change in condition Melting point/Melting range Boiling point/Boiling range</b>	Undetermined 230°C
<b>Flash Point</b>	181°C	<b>Flammability (solid, gaseous)</b>	Not applicable
<b>Ignition temperature Decomposition temperature</b>	Not determined		
<b>Auto igniting</b>	Product is not selfigniting	<b>Danger of explosion</b>	Product does not present an explosion hazard
<b>Explosion limits Lower Upper</b>	Not determined Not determined	<b>Vapor pressure</b>	Not determined Not applicable
<b>Density at 20°C Relative density Vapour density Evaporation rate</b>	1.15 g/cm <sup>3</sup> Not determined Not determined Not determined	<b>Solubility in / Miscibility with Water</b>	Not miscible or difficult to mix
<b>Partition coefficient (n-octanol/water)</b>	Not determined	<b>Viscosity Dynamic at 20°C Kinematic</b>	3000 mPas Not determined Not applicable
<b>Solvent content Organic solvents</b>	0.0%		
<b>Solids Content Other information</b>	100.0% VOC: 2 g/L (Component A+B)		

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**Section 10 - STABILITY AND REACTIVITY**

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**Thermal Decomposition/Conditions to be Avoided:**

No decomposition if used according to specifications.

**Possibility of Hazardous Reactions**

No dangerous reactions known.

**Conditions to Avoid**

No further relevant information available.

**Incompatible Materials**

No further relevant information available.

**Hazardous decomposition products**

No dangerous decomposition products known.

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**Section 11 - TOXICOLOGICAL INFORMATION**

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**Information on Toxicological Effects:****Acute Toxicity**

<b>LD/LC50 values that are relevant for classification:</b>		
<b>822-06-0 hexamethylene-di-isocyanate</b>		
Oral	LD50	738 mg/kg (rat)
Dermal	LD50	593 mg/kg (rat)

**Specific Symptoms in Biological Assay:**

No further relevant information available.

**Primary Irritant Effect:**

**On the skin:** No irritant effect.

**On the eye:** No irritating effect.

**Sensitization:**

Sensitization possible through inhalation.

Sensitization possible through skin contact.

**Additional Toxicological Information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Toxic

Harmful

Irritant

**Carcinogenic Categories**

<b>IARC (International Agency for Research on Cancer)</b>
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## Safety Data Sheet

**Material Name: LiquiSeal Liquid Flashing Resin 1.1G**

**Product #: 330892 – 1.1G**

None of the ingredients is listed.
<b>NTP (National Toxicology Program)</b>
None of the ingredients is listed.
<b>OSHA-Ca (Occupational Safety &amp; Health Administration)</b>
None of the ingredients is listed.

### Section 12 - ECOLOGICAL INFORMATION

**Aquatic Toxicity:**

No further relevant information available.

**Persistence and Degradability:**

No further relevant information available.

**Bioaccumulative Potential:**

No further relevant information available.

**Mobility in Soil:**

No further relevant information available.

**Additional Ecological Information:**

**General Notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**Other Adverse Effects:**

No further relevant information available.

### Section 13 - DISPOSAL CONSIDERATIONS

**Waste Treatment Methods**

**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned Packagings:**

**Recommendations:**

Place in a sealed container and label as waste. Place in a safe area, and comply with all federal, state, provincial and local regulations for disposal.

### Section 14 - TRANSPORT INFORMATION

<b>UN-Number</b>	
<b>DOT, TDG, ADN, IMDG, IATA</b>	Not Regulated
<b>UN proper shipping name</b>	
<b>DOT, TDG, ADN, IMDG, IATA</b>	Not Regulated
<b>Transport hazard class(es)</b>	
<b>DOT, TDG, ADN, IMDG, IATA</b>	
<b>Class</b>	Not Regulated



## Safety Data Sheet

**Material Name:** LiquiSeal Liquid Flashing Resin 1.1G

**Product #:** 330892 – 1.1G

<b>Packing group</b>	
<b>DOT, TDG, IMDG, IATA</b>	Not Regulated
<b>Environmental hazards:</b>	
<b>Marine pollutant:</b>	No
<b>Special precautions for user:</b>	Not applicable
<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:</b>	Not applicable.
<b>UN “Model Regulation”:</b>	-

### Section 15 - REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture**  
**Sara**

<b>Section 355 (extremely hazardous substances)</b>	
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
<b>Section 313 (Specific toxic chemical listings)</b>	
822-06-0	hexamethylene-di-isocyanate
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
<b>TSCA (Toxic Substance Control Act)</b>	
All ingredients are listed or exempted	

**Proposition 65**

<b>Chemicals known to cause cancer:</b>
None of the ingredients is listed.
<b>Chemicals known to cause reproductive toxicity for females:</b>
None of the ingredients is listed.
<b>Chemicals known to cause reproductive toxicity for males:</b>
None of the ingredients is listed.
<b>Chemicals known to cause developmental toxicity:</b>
None of the ingredients is listed.

**Carcinogenic Categories**

<b>EPA (Environmental Protection Agency):</b>
None of the ingredients is listed.
<b>TLV (Threshold Limit Value established by ACGIH):</b>
None of the ingredients is listed.
<b>NIOSH-Ca (National Institute for Occupational Safety and Health)</b>
None of the ingredients is listed.

**Canadian Substance Listings**

## Safety Data Sheet

**Material Name: LiquiSeal Liquid Flashing Resin 1.1G**

**Product #: 330892 – 1.1G**

<b>Canadian Domestic Substances List (DSL)</b>	
All ingredients is listed.	
<b>Canadian Ingredient Disclosure List (Limit 0.1%):</b>	
822-06-0	hexamethylene-di-isocyanate
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
<b>Canadian Ingredient Disclosure List (Limit 1%)</b>	
None of the ingredients is listed.	

### GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS)

### Hazard Pictograms



GHS07



GHS08

### Signal Word:

Danger

### Hazard-determining Components of Labeling:

poly(hexamethylene diisocyanate)

Poly(3-isocyanatomethyl- 3,5,5-trimethylcyclohexylisocyanate) hexamethylene-di-isocyanate

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

### Hazard Statements:

Causes serious eye irritation.

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

May cause an allergic skin reaction.

May cause respiratory irritation.

### Precautionary Statements:

Do not breathe mist/vapours/spray.

In case of inadequate ventilation wear respiratory protection.

Wear protective gloves / eye protection / face protection.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

If experiencing respiratory symptoms: Call a poison center/doctor.

IF INHALED: Call a POISON CENTER/doctor if you feel unwell.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

If skin irritation occurs: Get medical advice/attention.

## Safety Data Sheet

**Material Name: LiquiSeal Liquid Flashing Resin 1.1G**

**Product #: 330892 – 1.1G**

If eye irritation persists: Get medical advice/attention.

If on skin: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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### Section 16 - OTHER INFORMATION

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#### Summary of Changes

Revision Date: October 03, 2018

Revision Note: General Update

#### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.



## Safety Data Sheet

**Material Name: LiquiSeal Liquid Flashing Resin 1.1G**

**Product #: 330892 – 1.1G**

### **Other Information**

#### **Disclaimer:**

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.