
Section 1 - PRODUCT AND COMPANY IDENTIFICATION

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

Versico LLC

1285 Ritner Highway

Carlisle, PA 17013

USA

Phone: +1-800-479-6832

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

Section 2 - HAZARDS IDENTIFICATION

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.

Safety Data Sheet

Material Name: LiquiSeal Liquid Flashing Resin 1.1G

Product #: 330892 – 1.1G

Label Elements

GHS Label Elements

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

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 irritaiton.

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

May cause an allergic skin reation.

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.



Safety Data Sheet

Material Name: LiquiSeal Liquid Flashing Resin 1.1G

Product #: 330892 – 1.1G

NFPA ratings (scale 0 - 4):



Health = 3
Fire = 1
Reactivity = 0

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

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.

Section 4 - FIRST AID MEASURES

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.

Safety Data Sheet

Material Name: LiquiSeal Liquid Flashing Resin 1.1G

Product #: 330892 – 1.1G

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.

Section 5 - FIRE FIGHTING MEASURES

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.

Section 6 - ACCIDENTAL RELEASE MEASURES

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.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

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

Prevent formation of aerosols.

Safety Data Sheet

Material Name: LiquiSeal Liquid Flashing Resin 1.1G

Product #: 330892 – 1.1G

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.

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.

Component with limit values that require monitoring at the workplace:	
822-06-0 hexamethylene-di-isocyanate	
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
4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	
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.

Safety Data Sheet

Material Name: LiquiSeal Liquid Flashing Resin 1.1G

Product #: 330892 – 1.1G

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.

Material of Gloves:

Nitrile rubber, NBR

Butyl rubber, BR

Neoprene gloves

Eye Protection



Tightly sealed goggles.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid	Color	Transparent
Odor	Nearly odorless	Odour threshold	Not determined
pH-value	Not determined	Change in condition Melting point/Melting range Boiling point/Boiling range	Undetermined 230°C
Flash Point	181°C	Flammability (solid, gaseous)	Not applicable
Ignition temperature Decomposition temperature	Not determined		
Auto igniting	Product is not selfigniting	Danger of explosion	Product does not present an explosion hazard

Safety Data Sheet

Material Name: LiquiSeal Liquid Flashing Resin 1.1G

Product #: 330892 – 1.1G

Explosion limits Lower Upper	Not determined Not determined	Vapor pressure	Not determined Not applicable
Density at 20°C Relative density Vapour density Evaporation rate	1.15 g/cm ³ Not determined Not determined Not determined	Solubility in / Miscibility with Water	Not miscible or difficult to mix
Partition coefficient (n-octanol/water)	Not determined	Viscosity Dynamic at 20°C Kinematic	3000 mPas Not determined Not applicable
Solvent content Organic solvents	0.0%		
Solids Content Other information	100.0% VOC: 2 g/L (Component A+B)		

Section 10 - STABILITY AND REACTIVITY

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.

Section 11 - TOXICOLOGICAL INFORMATION

Information on Toxicological Effects:

Acute Toxicity

LD/LC50 values that are relevant for classification:
822-06-0 hexamethylene-di-isocyanate

Safety Data Sheet

Material Name: LiquiSeal Liquid Flashing Resin 1.1G

Product #: 330892 – 1.1G

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

IARC (International Agency for Research on Cancer)
None of the ingredients is listed.
NTP (National Toxicology Program)
None of the ingredients is listed.
OSHA-Ca (Occupational Safety & Health Administration)
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.

Safety Data Sheet

Material Name: LiquiSeal Liquid Flashing Resin 1.1G

Product #: 330892 – 1.1G

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

UN-Number	
DOT, TDG, ADN, IMDG, IATA	Not Regulated
UN proper shipping name	
DOT, TDG, ADN, IMDG, IATA	Not Regulated
Transport hazard class(es)	
DOT, TDG, ADN, IMDG, IATA	
Class	Not Regulated
Packing group	
DOT, TDG, IMDG, IATA	Not Regulated
Environmental hazards:	
Marine pollutant:	No
Special precautions for user:	Not applicable
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable.
UN "Model Regulation":	-

Section 15 - REGULATORY INFORMATION

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

Section 355 (extremely hazardous substances)	
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

Safety Data Sheet

Material Name: LiquiSeal Liquid Flashing Resin 1.1G

Product #: 330892 – 1.1G

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

Proposition 65

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

Carcinogenic Categories

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

Canadian Substance Listings

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

GHS label elements

The 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

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.

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.

Safety Data Sheet

Material Name: LiquiSeal Liquid Flashing Resin 1.1G

Product #: 330892 – 1.1G

Section 16 - OTHER INFORMATION

This MSDS format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements. Kemper System America, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Product use and conditions of use are beyond the control of Kemper System America, Inc. Warranty of materials is limited to test results of product performance as detailed in certificates of compliance. Interpretation of test results is the responsibility of end-user. No other warranties, expressed or implied, are made. Kemper System America, Inc is an ISO 9001:2008 and ISO 14001:2004 registered company.

Date of preparation / last revision:

03/16/2015 / -

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.

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



Safety Data Sheet

Material Name: LiquiSeal Liquid Flashing Resin 1.1G

Product #: 330892 – 1.1G

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.