

GLASSTACK 151 (All grades)

Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Date of issue: May 12, 2016 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : GLASSTACK 151 (All grades)

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

Use of the substance/mixture : Solvent Based Insulation Adhesive

1.3. Details of the supplier of the safety data sheet

Polymer Adhesives

501 Garrett Morris Pkwv

Mineral Wells, TX 76067 - USA

T 1 (888) 721-7325

1.4. Emergency telephone number

Emergency number : 1-800-424-9300 (CHEMTREC)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable liquids Category 2

Skin corrosion/irritation Category 2

Reproductive toxicity, Category 2

Specific target organ toxicity (single exposure) Category 3

Specific target organ toxicity (repeated exposure) Category 2

H373

Full text of H statements: see section 16

2.2. Label elements

GHS-US labelling

Signal word (GHS-US)

Hazard pictograms (GHS-US)







G11302

: Danger

Precautionary statements (GHS-US)

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, open flames, sparks. - No smoking

P233 - Keep container tightly closed

P240 - Ground/Bond container and receiving equipment

P241 - Use explosion-proof electrical, lighting, ventilating equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

P260 - Do not breathe fume, mist, spray, vapors P264 - Wash hands thoroughly after handling P271 - Use only outdoors or in a well-ventilated area

P280 - Wear eye protection, protective gloves, respiratory protection

P302+P352 - If on skin: Wash with plenty of water

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

P308+P313 - If exposed or concerned: Get medical advice/attention

P331 - Do NOT induce vomiting

P332+P313 - If skin irritation occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

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2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product identifier | % | GHS-US classification |
|----------|--------------------|---------|---|
| n-Hexane | (CAS No) 110-54-3 | 59 - 71 | Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 |
| Toluene | (CAS No) 108-88-3 | 2 - 4 | Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 |

Full text of hazard classes and H-statements: see section 16

SECTION 4: First aid measures

| | 4.1. | Description of first aid n | neacures |
|--|------|----------------------------|----------|
|--|------|----------------------------|----------|

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/take off immediately all contaminated clothing. Wash

with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or

doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.

Chronic symptoms : May damage hearing organs following prolonged or repeated exposure. Suspected of

damaging fertility or the unborn child.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapor. Combustion products: Carbon monoxide. Carbon dioxide.

May release flammable gases.

Explosion hazard : May form flammable/explosive vapor-air mixture. Vapors are heavier than air and may travel

considerable distance to an ignition source and flash back to source of vapors.

Reactivity : None under normal conditions.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Prevent firefighting water from entering the

environment.

Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No

smoking.

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6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Avoid breathing fume/mist/vapors/spray.

Emergency procedures : Ventilate area.

Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and material for containment and cleaning up

Methods for cleaning up

: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Reference to other sections

See Heading 8. Exposure controls and personal protection. For disposal of residues refer to section 13: Disposal considerations.

SECTION 7: Handling and storage

Precautions for safe handling

Additional hazards when processed

: Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling

Hygiene measures

: Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing fume, mist, spray, vapors. Use only outdoors or in a well-ventilated area.

: Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond

container and receiving equipment. Use explosion-proof electrical, equipment, lighting,

ventilating equipment.

Keep only in the original container in a cool, well ventilated place away from incompatible Storage conditions

materials. Keep in fireproof place. Keep container tightly closed.

Incompatible materials Strong oxidizers. Strong acids, bases.

SECTION 8: Exposure controls/personal protection

Control parameters

| n-hexane (110-54-3) | | |
|---------------------|------------------------|------------|
| ACGIH | ACGIH TWA (ppm) | 50 ppm |
| OSHA | OSHA PEL (TWA) (mg/m³) | 1800 mg/m³ |
| OSHA | OSHA PEL (TWA) (ppm) | 500 ppm |

| Toluene (108-88-3) | | |
|--------------------|--------------------------|-----------|
| ACGIH | ACGIH TWA (mg/m³) | 188 mg/m³ |
| ACGIH | ACGIH TWA (ppm) | 20 ppm |
| OSHA | OSHA PEL (TWA) (ppm) | 200 ppm |
| OSHA | OSHA PEL (STEL) (ppm) | 300 ppm |
| OSHA | OSHA PEL (Ceiling) (ppm) | 500 ppm |
| NIOSH | NIOSH REL (TWA) (mg/m³) | 375 mg/m³ |
| NIOSH | NIOSH REL (TWA) (ppm) | 100 ppm |
| NIOSH | NIOSH REL (STEL) (mg/m³) | 560 mg/m³ |
| NIOSH | NIOSH REL (STEL) (ppm) | 150 ppm |

Exposure controls

Appropriate engineering controls : Provide local exhaust or general room ventilation to minimize vapor concentrations. Proper grounding procedures to avoid static electricity should be followed.

Hand protection : Wear impervious gloves e.g. PVC, nitrile rubber, butyl rubber.

Eye protection Chemical goggles or safety glasses.

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Skin and body protection : Long sleeved protective clothing.

Respiratory protection : In case of inadequate ventilation wear respiratory protection. NIOSH mask with filter for organic

gases and vapors.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Tacky, slightly viscous liquid
Color : Red, black or clear (Translucent)

Odor : Slight hydrocarbon odor

Odor threshold : No data available pH : No data available Melting point : No data available Freezing point : No data available Boiling point : No data available : No data available

Flash point : < 0 °F

Relative evaporation rate (butyl acetate=1) No data available Flammability (solid, gas) : Not applicable : 140 mm Hg at 68°F Vapor pressure Relative vapor density at 20 °C : No data available Relative density : 0.72 - 0.84 g/cc : No data available Solubility Log Pow : No data available : No data available Auto-ignition temperature Decomposition temperature : No data available Viscosity, kinematic : 300 - 600 cps Viscosity, dynamic : No data available

Explosive limits : Lower explosive limit (LEL): 1.2 vol %

Upper explosive limit (UEL): 7.5 vol %

Explosive properties : No data available
Oxidizsing properties : No data available

9.2. Other information

% Solids: 26 - 37 % VOC: < 550 g/L

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Heat sources.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

None known. Combustion products: Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Ingestion; Inhalation; Skin and Eye contact

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| | Acute toxicity | Not classified |
|---------------------|---------------------------|-------------------------|
| n-hexane (110-54-3) | | |
| | LD50 oral rat | 25 g/kg |
| | LD50 dermal rabbit | 3000 mg/kg |
| | LC50 inhalation rat (ppm) | 48000 ppm/4h |
| | Skin corrosion/irritation | Causes skin irritation. |

Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

| Toluene (108-88-3) | |
|--------------------|----------------------|
| IARC group | 3 - Not classifiable |

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Specific target organ toxicity (single exposure)

: May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure)

: May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.

Chronic symptoms : Suspected of damaging fertility or the unborn child. May damage hearing organs following

prolonged or repeated exposure.

SECTION 12: Ecological information

12.1. Toxicity

| n-hexane (110-54-3) | |
|---------------------|---|
| LC50 fish 1 | 2.1 - 2.98 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |

12.2. Persistence and degradability

| GLASSTACK 151 (All grades) | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

12.3. Bioaccumulative potential

| GLASSTACK 151 (All grades) | |
|----------------------------|------------------|
| Bioaccumulative potential | Not established. |
| n-hexane (110-54-3) | |
| Log Pow | 3.9 |

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known effects from this product.

GWPmix comment : No known effects from this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose of contents/container to comply with applicable local, national and international

regulation.

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1993 Flammable liquids, n.o.s. (n-Hexane, Toluene mixture), 3, II

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UN-No.(DOT) : UN1993

Proper Shipping Name (DOT) : Flammable liquids, n.o.s.

(n-hexane, Toluene mixture)

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : II - Medium Danger Hazard labels (DOT) : 3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx) : 20

DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Symbols : G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110

kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized

T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / (1 + a (tr - tf)) Where: tr is the maximum mean bulk

temperature during transport, and tf is the temperature in degrees celsius of the liquid during

filling

TP8 - A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when

the flash point of the hazardous material transported is greater than 0 C (32 F)

TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the

MAWP

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Quantity Limitations Passenger aircraft/rail : 5 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

CFR 175.75)

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this

section is exceeded

Emergency Response Guide (ERG) Number : 128

Other information : No supplementary information available.

TDG

Transport document description : UN1993 FLAMMABLE LIQUID, N.O.S. (n-hexane, Toluene mixture), 3, II

UN-No. (TDG) : UN1993

Proper Shipping Name (TDG) : FLAMMABLE LIQUID, N.O.S.

TDG Primary Hazard Classes : 3 - Class 3 - Flammable Liquids

Packing group : II - Medium Danger

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TDG Special Provisions

: 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name: (a)UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; (b)UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; (c)UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; (d)UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or (e)UN3249, MEDICINE, SOLID, TOXIC, N.O.S. An example in Canada is the "Food and Drugs Act". (3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment: (a)UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or (b)UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS. SOR/2014-306,150 - An emergency response assistance plan (ERAP) is required for these dangerous goods under subsection 7.1(6) of Part 7 (Emergency Response Assistance Plan)

Explosive Limit and Limited Quantity Index : 1 L
Passenger Carrying Road Vehicle or Passenger : 5 L

Carrying Railway Vehicle Index

Transport by sea

UN-No. (IMDG) : 1993

Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, N.O.S. (N-HEXANE, TOLUENE MIXTURE)

Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : II - substances presenting medium danger

Limited quantities (IMDG) : 1 L

Air transport

UN-No. (IATA) : 1993

Proper Shipping Name (IATA) : Flammable liquid, n.o.s. (n-Hexane, Toluene mixture)

Class (IATA) : 3 - Flammable Liquids
Packing group (IATA) : II - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

| n-Hexane (110-54-3) | |
|---|--|
| Listed on the Canadian DSL (Domestic Substanc | es List) |
| WHMIS Classification | Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects |

Toluene (108-88-3)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

n-Hexane (110-54-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Toluene (108-88-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

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n-Hexane (110-54-3)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

Listed on the Canadian IDL (Ingredient Disclosure List)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on CICR (Turkish Inventory and Control of Chemicals)

Toluene (108-88-3)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Japanese Poisonous and Deleterious Substances Control Law

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

Listed on the Canadian IDL (Ingredient Disclosure List)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on CICR (Turkish Inventory and Control of Chemicals)

15.3. US State regulations

California Proposition 65 - This product does contain substances known to the state of California to cause cancer, developmental and/or reproductive harm.

SECTION 16: Other information

Date of Prearation : May 12, 2016

Other information : None.

Full text of H-statements:

| • | e of the diatornomic. | |
|---|-----------------------|---|
| | H225 | Highly flammable liquid and vapor |
| | H226 | Flammable liquid and vapor |
| | H304 | May be fatal if swallowed and enters airways |
| | H315 | Causes skin irritation |
| | H336 | May cause drowsiness or dizziness |
| | H361 | Suspected of damaging fertility or the unborn child |
| | H373 | May cause damage to organs through prolonged or repeated exposure |
| | | |

Abbreviations and acronyms:

| viations and actoriyins. | | |
|--------------------------|---|--|
| ACGIH | American Conference of Government Industrial Hygienists | |
| DNEL | Derived-No Effect Level | |
| IARC | International Agency for Research on Cancer | |
| IDLH | Immediately Dangerous to Life or Health | |
| IARC | International Agency for Research on Cancer | |
| IRR | Irritation | |
| NIOSH | National Institute for Occupational Safety and Health | |
| PVC | Polyvinyl chloride | |
| REL | Recommended exposure limit | |
| TLV | Threshold Limit Value | |
| | | |

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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