



GluDown® Polystyrene Foam Spray Adhesive

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

Product Name: GluDown® Polystyrene Spray Adhesive

Revision Date: August 24, 2017

Version: 5.0

Part Number: GD1510

Manufactured For:

GluDown, Inc.

P.O. Box 12251

Dallas, TX 75225

United States of America

Information Phone: 214-504-2503

Emergency Phone: Chemtrec 800-424-9300

Product/Recommended Uses: Adhesive

Restriction on Use: For commercial use only – not packaged or labeled for home use.

SECTION 2: HAZARDS IDENTIFICATION

Classification:

Specific Target Organ Toxicity -Single Exposure (Narcotic Effects) - Category 3

Specific Target Organ Toxicity - Repeated Exposure - Category 2

Aspiration Hazard - Category 1

Skin Irritation - Category 2

Eye Irritation - Category 2A

Reproductive Toxicity - Category 2

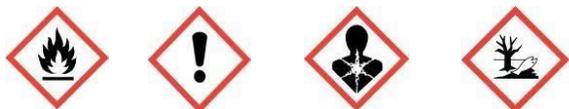
Chronic aquatic toxicity - Category 2

Aerosols Category 1

Acute aquatic toxicity - Category 2

Acute toxicity, Oral - Category 5

Pictograms:



Signal Word:

Danger

Hazardous Statements - Physical:

H222 - Extremely flammable aerosol

H229 - Pressurized container: May burst if heated

Hazardous Statements - Health:

H336 - May cause drowsiness or dizziness

H373 - May cause damage to organs through prolonged or repeated exposure

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H361 - Suspected of damaging fertility or an unborn child

H303 - May be harmful if swallowed

Hazardous Statements - Environmental:

H401 - Toxic to aquatic life

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - General:

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

Precautionary Statements - Prevention:

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P271 - Use only outdoors or in a well-ventilated area.

P233 - Keep container tightly closed.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264 - Wash thoroughly after handling.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P273 - Avoid release to the environment.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 - Do not spray on an open flame or other ignition source.

P251 - Do not pierce or burn, even after use.

Precautionary Statements - Response:

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 - Call a POISON CENTER/doctor if you feel unwell.

P314 - Get Medical advice/attention if you feel unwell.

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.

P331 - Do NOT induce vomiting.

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P321 - For specific treatment see section 4.

P332 + P313 - If skin irritation occurs: Get medical advice/attention.

P362 + P364 - Take off contaminated clothing. And wash it before reuse.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical advice/attention.

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

P391 - Collect spillage.

Precautionary Statements - Storage:

P403 + P405 - Store in a well-ventilated place. Store locked up.

P405 - Store locked up.

P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Precautionary Statements - Disposal:

P501 - Dispose of contents/container to disposal recycling center. Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Acute toxicity of 1.22% of the mixture is unknown

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENT

CAS	Chemical Name	% By Weight
0000115-10-6	METHYL ETHER	28% - 46%
0000110-54-3	HEXANE	9% - 20%
0000110-82-7	CYCLOHEXANE	9% - 20%
0220543-67-9	Cyclopentene, polymer with 1-butene, (2E)-2-butene, (2Z)-2-butene, 2-methyl-1propene and 1,3-pentadiene	6% - 13%
0025038-32-8	Benzene, ethenyl-, polymer with 2-methyl-1,3-butadiene	4% - 9%
0000096-14-0	3-METHYL PENTANE	1.3% - 3%
0000096-37-7	METHYL CYCLOPENTANE	1.3% - 3%
0000107-83-5	2-METHYL PENTANE	0.1% - 2%
NA-ERAEnviro	Non Hazardous Volatile	0.1% - 2%
0003710-84-7	DIETHYL HYDROXYLAMINE	0.0% - 0.6%
0064742-94-5	AROMATIC HYDROCARBON MIXTURE >C9	0.0% - 0.4%
0000091-20-3	NAPHTHALENE	Trace
0000092-52-4	BIPHENYL	Trace
0000100-42-5	STYRENE	Trace

SECTION 4: FIRST-AID MEASURES

Inhalation:

Remove source of exposure or move person to fresh air and keep comfortable for breathing.

If exposed/feel unwell/concerned:

Call a POISON CENTER/doctor.

Eliminate all ignition sources if safe to do so.

Skin Contact:

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes.

If skin irritation occurs:

Get medical advice/attention. Wash contaminated clothing before re-use.

If exposed or concerned:

Get medical advice/attention.

Eye Contact:

Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Ingestion:

Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position. Do not give anything.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Dry chemical, foam, carbon dioxide is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.

Do not direct a solid stream of water or foam into hot, burning pools this may results in frothing and increase fire intensity.

Unsuitable Extinguishing Media:

Not available.

Specific Hazards in Case of Fire:

Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Product is highly flammable and forms explosive mixtures with air, oxygen, and all oxidizing agents. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back.

During a fire, irritating and highly toxic gases may be generated during combustion or decomposition. High temperatures can cause sealed containers to rupture due to a build up of internal pressures. Cool with water.

DO NOT cut, drill, grind, or weld near full, partially full, or empty product containers.

Container could potentially burst or be punctured upon mechanical impact, releasing flammable vapors.

Fire-Fighting Procedures:

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions:

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedure:

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch or walk through spilled material.

Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

Recommended Equipment:

Positive pressure, full-facepiece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

Personal Precautions:

Avoid breathing vapor. Avoid contact with skin, eye or clothing. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions:

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning Up:

Cover spills with inert absorbent and place in closed chemical waste containers.

SECTION 7: HANDLING AND STORAGE
--

General:

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements:

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements:

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight, strong oxidizers and any incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage.

Empty containers retain residue and may be dangerous.

Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored.

Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize containers to empty them.

Store at temperatures below 120°F.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection:

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection:

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen
2-METHYL PENTANE												
3-METHYL PENTANE												
AROMATIC HYDROCARBON MIXTURE >C9	500	2000			1							
BIPHENYL	0.2	1			1			0.2	1			
CYCLOHEXANE	300	1050			1			300	1050			
DIETHYL HYDROXYLAMINE												
HEXANE	500	1800			1			50	180			
NAPHTHALENE	10	50			1			10	50	15	75	

STYRENE	100 (a)/ 200 ceiling		600 (a) /5 mins. in any 3 hrs.		1,2			50	215	100	425	
Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)								
2-METHYL PENTANE	500		1000									
3-METHYL PENTANE	500		1000									
AROMATIC HYDROCARBON MIXTURE >C9												
BIPHENYL	0.2	1.26										
CYCLOHEXANE	100											
DIETHYL HYDROXYLAMINE	2											
HEXANE	50	176										
NAPHTHALENE	10											
STYRENE	20	85	40	170								

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	6.01677 lb/gal
Density VOC	4.79900 lb/gal
VOC Actual	575.06411 g/l
VOC Actual	4.79900 lb/gal
% VOC	79.76%
Appearance	Orange Liquid
Odor Threshold	N.A.
Odor Description	Sweet Pungent
pH	N.A.
Flammability	N.A.
Water Solubility	N.A.
Flash Point Symbol	N.A.
Flash Point	N.A.
Viscosity	N.A.
Lower Explosion Level	N.A.
Upper Explosion Level	N.A.

Vapor Pressure	N.A.
Vapor Density	N.A.
Freezing Point	N.A.
Melting Point	N.A.
Low Boiling Point	N.A.
High Boiling Point	N.A.
Auto Ignition Temp	N.A.
Evaporation Rate	N.A.
VOC Composite Partial Pressure	N.A.

SECTION 10: STABILITY AND REACTIVITY

Stability:

Material is stable at standard temperature and pressure.

Conditions to Avoid:

Keep away from direct sunlight and other sources of ignition.

Dropping containers may cause bursting.

Hazardous Reactions/Polymerization:

Will not occur

Incompatible Materials:

Avoid strong oxidizers, reducers, acids, and alkalis.

Hazardous Decomposition Products:

No data available.

SECTION 11: TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation:

Prolonged or repeated contact with this product may dry and/or defat the skin. This product may be harmful if it is absorbed through the skin.

Causes skin irritation.

Serious Eye Damage/Irritation:

Eye contact may lead to permanent damage if not treated promptly.

Liquid or vapors may irritate the eyes.

Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Eye contact may lead to permanent damage if not treated promptly.

Causes serious eye irritation.

Respiratory/Skin Sensitization:

No Data Available.

Germ Cell Mutagenicity:

No Data Available.

Carcinogenicity:

No Data Available

Reproductive Toxicity:

Suspected of damaging fertility or an unborn child

Specific Target Organ Toxicity – Single Exposure:

May cause drowsiness or dizziness

Specific Target Organ Toxicity - Repeated Exposure:

Prolonged exposure may cause damage to her central nervous system, lungs, skin and eyes.

May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard:

May be fatal if swallowed & enter airways.

Acute Toxicity:

If inhaled, may cause dizziness, nausea, upper respiratory irritation, drowsiness, mental depression or narcosis, difficulty in breathing, irregular heart beats.

0064742-94-5 AROMATIC HYDROCARBON MIXTURE >C9

LC50 (Rodent - rat, Inhalation) : >590 mg/m³ (4 hour exposure)

Toxic effects: Details of toxic effects not reported other than lethal dose value.

0000092-52-4 BIPHENYL

LD50 (oral, rat): 3280 mg/kg (7); 5040 mg/kg (8)

0000110-82-7 CYCLOHEXANE

LD50 (oral, rat): 8-39 mL/kg (6200 to 30400 mg/kg) (3)

LD50 (oral, mouse): 1300 mg/kg (3)

LD50 (dermal, rabbit): Greater than 18000 mg/kg (4)

0000110-54-3 HEXANE

LC50 (male rat): 38500 ppm (4-hour exposure); cited as 77000 ppm (271040 mg/m³) (1hour exposure) (15) LC50 (rat): 48000 ppm (4-hour exposure) (16)

LC50 (rat): 73680 ppm (260480 mg/m³) (4-hour exposure) (n-hexane and isomers) (1,3)

LD50 (oral, 14-day old rat): 15840 mg/kg (3)

LD50 (oral, young rat): 32340 mg/kg (3)

LD50 (oral, adult rat): 28700 mg/kg (3,16)

0000091-20-3 NAPHTHALENE

LC50: Insufficient data

LD50 (oral, mouse): 533 mg/kg (male); 710 mg/kg

(female) (1) LD50 (oral, rat): 1780 mg/kg (2)

0000100-42-5 STYRENE

LC50 (rat): 5640 ppm (24000 mg/m³) (4-hour exposure; unconfirmed) (1);2800 ppm (4-hour exposure) (26)

LC50 (mouse): 2230 ppm (9500 mg/m³) (4-hour exposure; unconfirmed) (1); 5000 ppm (2-hour exposure) (26)

LD50 (oral, rat): 5000 mg/kg (2)

LD50 (oral, mouse): 316 mg/kg (unconfirmed) (1)

SECTION 12: ECOLOGICAL INFORMATION**Toxicity:**

Toxic to aquatic life

Toxic to aquatic life with long lasting effects

Persistence and Degradability:

No data available.

Bio-accumulative Potential:

No data available.

Mobility in Soil:

No data available.

Other Adverse Effects:

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal:

Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14: TRANSPORT INFORMATION

U.S. DOT Information:

Ground Transportation: (Continental United States, Canada & Mexico): Limited Quantity

IMDG Information:

Shipping Name: Aerosols, flammable
 UN/NA #: 1950
 Hazard Class: 2.1
 Required Placard: Limited Quantity
 Marine Pollutant: No data available

IATA Information:

We do NOT recommend this product to be shipped via air. It would need to be repacked by an authorized packing company and the DG would have to be completed by a licensed hazardous material shipping company.

SECTION 15: REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0000115-10-6	METHYL ETHER	28% - 46%	SARA312,VOC,TSCA
0000110-54-3	HEXANE	9% - 20%	CERCLA,HAPS,SARA312,SARA313,VHAPS,VOC,TSCA
0000110-82-7	CYCLOHEXANE	9% - 20%	CERCLA,SARA312,SARA313,VOC,TSCA,RCRA

0220543-67-9	Cyclopentene, polymer with 1-butene, (2E)-2butene, (2Z)-2-butene, 2methyl-1propene and 1,3pentadiene	6% - 13%	SARA312,TSCA
0025038-32-8	Benzene, ethenyl-, polymer with 2-methyl-1,3-butadiene	4% - 9%	SARA312,TSCA
0000096-14-0	3-METHYL PENTANE	1.3% - 3%	SARA312,VOC,TSCA
0000096-37-7	METHYL CYCLOPENTANE	1.3% - 3%	SARA312,VOC,TSCA
NA-ERAEnviro	Non Hazardous Volatile	0.1% - 2%	SARA312
0000107-83-5	2-METHYL PENTANE	0.1% - 2%	SARA312,VOC,TSCA
0003710-84-7	DIETHYL HYDROXYLAMINE	0.0% - 0.6%	SARA312,VOC,TSCA
0064742-94-5	AROMATIC HYDROCARBON MIXTURE >C9	0.0% - 0.4%	SARA312,VOC,TSCA
0000091-20-3	NAPHTHALENE	Trace	CERCLA,HAPS,SARA312,SARA313,VHAPS,VOC,TSCA,RCRA,CA_Prop65 - California Proposition 65
0000092-52-4	BIPHENYL	Trace	CERCLA,HAPS,SARA312,SARA313,VHAPS,VOC,TSCA
0000100-42-5	STYRENE	Trace	CERCLA,HAPS,SARA312,SARA313,VHAPS,VOC,TSCA

SECTION 16: OTHER INFORMATION

DISCLAIMER

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.