SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: HELMITIN INC.
U.S.: 11110 Airport Road
      Olive Branch, MS  38654
      662-895-4565
CANADA: 99 Shorncliffe Road
         Toronto, ON  M8Z 5K7
         416-239-3105
EMERGENCY PHONE:
800-424-9300 (CHEMTREC)
613-996-6666 (CANUTEC)

TRADE NAME AND SYNONYMS: HELMIPRENE 1685, HELMIPRENE 1685GR, HELMIPRENE 1685RD

CHEMICAL NAME AND SYNONYMS: Resin reinforced synthetic elastomer adhesive

CHEMICAL FAMILY: Synthetic elastomers, resins and solvents

MOLECULAR FORMULA: Not applicable

PRODUCT DESCRIPTION: Resin reinforced synthetic elastomer adhesive

SECTION 2 - HAZARDOUS INGREDIENTS

EXPOSURE GUIDELINES

% BY        CAS NUMBER         TLV         TLV-TWA      PEL-STEL
MATERIAL    WEIGHT      ACGIH    OSHA
Methylene chloride  30-60  75-09-2  50 ppm     25 ppm  125 ppm
Hydrocarbon propellant  15-40  68476-86-8 1000 ppm  800 ppm  Not listed

SECTION 3 – HAZARDOUS IDENTIFICATIONS

EMERGENCY OVERVIEW: Causes eye irritation. Can cause severe respiratory irritation. Can cause severe central nervous system depression. Smoking and/or consumption of alcoholic beverages may increase toxic effects of this material.

POTENTIAL HEALTH EFFECTS:

EYE CONTACT: May cause severe irritation. May damage eyes.

SKIN CONTACT: Prolonged exposure may cause skin irritation. May cause drying or flaking of skin. Skin absorption of material may cause systemic toxicity.

INGESTION: Ingestion may cause severe injury to intestinal tract, liver, kidneys, stomach, throat, lungs, mouth and mucous membranes. Harmful or fatal if swallowed. Do not ingest.

INHALATION: Overexposure may cause severe respiratory tract irritation. Prolonged overexposure may cause central nervous system depression with narcotic effects (headaches, dizziness, unconsciousness). Keep exposure below OSHA exposure limits.
**SECTION 4 - FIRST AID MEASURES**

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

**SKIN:** Wash with soap and water. Get medical attention if irritation develops or persists. Immediately remove contaminated clothing.

**INGESTION:** If swallowed, seek medical attention immediately. Do not induce vomiting. This material is an aspiration hazard. Can enter lungs and cause damage.

**INHALATION:** Remove to fresh air. Restore breathing if necessary. Get medical attention. This material can cause lung damage.

DO NOT LEAVE VICTIM UNATTENDED.

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**SECTION 5 - FIRE FIGHTING MEASURES AND FIRE HAZARDS**

**OSHA FLAMMABILITY CLASS:** ..............None

**FLASHPOINT:** ..............................................Propellant: -157°F, -105°C (Tag Closed Cup); Concentrate: None

**LOWER EXPLOSIVE LIMIT:** ...............Propellant: 1.8%; Concentrate: 12.0%

**UPPER EXPLOSIVE LIMIT:** ...............Propellant: 9.5%; Concentrate: 19.0%

**GENERAL HAZARD:** May release combustible mixtures when temperatures reach 212°F (100°C) or higher or under extreme fire conditions. Toxic gases will form upon combustion. Closed containers may explode when exposed to extreme heat. Vapours are heavier than air and may travel a considerable distance.

**FIRE FIGHTING EQUIPMENT:** Respiratory and eye protection required for firefighting personnel. Full protective equipment and a self-contained breathing apparatus (SCBA) should be used in all indoor fires and any large outdoor fires.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide, carbon dioxide, smoke and fumes, hydrocarbon fragments, chlorine, and hydrochloric acid.

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**SECTION 6 – ACCIDENTAL RELEASE MEASURES (SPILLS OR LEAKS)**

**GENERAL INSTRUCTIONS:** Isolate the danger area and keep out unauthorized personnel. Stop spill if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see section 8). Prevent additional discharge of material. Notify the appropriate authorities immediately. Contain spilled liquid with sand, earth or other non-combustible inert absorbent material. Prevent run-off from entering storm sewers, ditches or waterways. Transfer absorbed waste material into properly identified drums. Treat waste material with same precautions as the adhesive.

Do not use solvent or flammable liquid to help clean up an accidental release.

Release to the environment may be reportable under environmental regulations.
SECTION 7 – HANDLING AND STORAGE

HANDLING: Open container slowly to relieve any pressure. This material can accumulate static charge by flow or agitation. Do not enter confined spaces such as tanks without following proper entry procedures as described in OSHA regulations at 29 CFR 1910.146. Do not breathe vapours. The use of respiratory protection is recommended when airborne concentrations of vapour exceed exposure guidelines. Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Wear appropriate protective gloves and clothing to prevent prolonged or repeated skin contact. Avoid contact with eyes.

STORAGE: Keep containers tightly closed. Use and store this material in a cool, dry, well-ventilated area away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Post area “No Smoking or Open Flames”. Store only in approved containers. Protect containers against physical damage. Indoor storage should meet OSHA standards and appropriate fire codes. DO NOT STORE OR USE THIS PRODUCT IN ZINC OR ALUMINUM EQUIPMENT.

EMPTY CONTAINERS: May contain liquid and vapour residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and death. “Empty” drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in accordance with governmental regulations.

Wash with soap and water before eating, drinking, smoking or using toilet facilities. Consult NFPA and OSHA codes.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

RESPIRATORY PROTECTION: A NIOSH/MSHA approved air purifying respirator with an organic vapour cartridge may be used under conditions where airborne concentrations are expected to exceed exposure guidelines. Protection provided by air purifying respirators is limited. Refer to respirator manufacturer’s selection guide for appropriate respirator for conditions encountered. If in doubt, seek the advice of an industrial hygienist or safety professional for appropriate air purifying respiratory equipment.

Use positive pressure air supplied respirator if there is potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection. When respiratory protection is used, a respiratory protection program meeting OSHA regulations at 29 CFR 1910.134 must be followed.

SKIN PROTECTION: The use of gloves impermeable to the specific material handled is advised to prevent prolonged or repeated skin contact. Where splashing is likely to occur, aprons impermeable to the specific material may be worn. Refer to the glove and protective clothing manufacturer’s selection guide for appropriate material.

EYE PROTECTION: Approved chemical splash goggles should be worn to safeguard against potential eye contact, irritation or injury. Where splashing is likely to occur, hard hats and face shields may be used to provide additional protection. Eye wash facilities should be available in the work area.

ENGINEERING CONTROLS: Provide sufficient mechanical ventilation to maintain exposure below TLV(s). The use of local exhaust ventilation is recommended. Provide mechanical ventilation of confined spaces. If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure guidelines, additional ventilation or exhaust systems may be required.
SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOUR: Amber, green or red liquid with ethereal odour

SPECIFIC GRAVITY: 1.17 (68°F – 20°C)

pH: Not applicable

BOILING POINT: Not established

FREEZING POINT: Not established

SOLUBILITY IN WATER: Negligible

% SOLIDS (BY WEIGHT): <30%

% VOLATILE (BY WEIGHT): >70%

VAPOUR PRESSURE (MM OF MERCURY): Not established

VAPOUR DENSITY (AIR = 1): Heavier than air

EVAPORATION RATE (BUTYL ACETATE = 1): Greater than butyl acetate

EVAPORATION RATE (ETHYL ETHER = 1): Slower than ethyl ether

SECTION 10 – STABILITY AND REACTIVITY

CHEMICAL STABILITY: Keep away from open flames, welding arcs or other high temperature sources which induce thermal decomposition. Stable at recommended application conditions. Avoid build-up of static electricity. Do not store or use this product in zinc or aluminum. Avoid direct sunlight and ultraviolet sources.

INCOMPATIBLE MATERIALS: Strong oxidizing agents, strong reducing agents, acids, bases, or unstable chemicals, chloroform, nitric compounds, peroxides, sulfur dichloride, strong alkalis, aluminum, zinc.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition is unlikely to occur, but under fire or extreme heat conditions, carbon monoxide, carbon dioxide, smoke and fumes, hydrocarbon fragments, chlorine and hydrochloric acid can be released.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 – TOXICOLOGICAL INFORMATION

MATERIAL: Methylene chloride Hydrocarbon propellant

SKIN (Dermal LD50): Not available Not listed

INGESTION (Oral LD50): 1.6 g/kg Oral/Rat Not listed

CHRONIC: Liver and kidney damage. May cause corneal opacity. May cause central nervous system depression causing headaches, nausea, dizziness and, in extreme cases, convulsions and coma. May cause birth defects.
CHRONIC / CARCINOGENICITY (CANCER CAUSING):
IARC: ..........2B
OSHA: ........Suspect
NTP: ...........Known - NO; Anticipated - YES
OTHER: ....This product contains the following chemicals known to the state of California (Proposition 65) to cause cancer or reproductive toxicity: Methylene chloride.

OTHER: None known.

SECTION 12 – ECOLOGICAL INFORMATION

No data available.

SECTION 13 – DISPOSAL CONSIDERATIONS

Incinerate at an EPA approved facility or dispose of in accordance with all federal, state/provincial and local regulations.

See Section 2, Page 1 of this MSDS for hazardous ingredients.

PROPER WASTE DISPOSAL IS THE RESPONSIBILITY OF THE OWNER OF THE WASTE!

Call Helmitin Inc. if additional information is necessary.

SECTION 14 – TRANSPORTATION INFORMATION

D.O.T. / T.D.G.:  
PROPER SHIPPING NAME: ..........LIQUEFIED GAS, FLAMMABLE, N.O.S. (PROPANE/ISOBUTANE)  
HAZARD CLASSIFICATION:..............2.1  
UN NUMBER:..................................UN3161  
PACKING GROUP:..........................Not applicable

All packaged material must be labeled in accordance with DOT and OSHA standards.

EMERGENCY RESPONSE GUIDE (ERG) #: 115

DO NOT SHIP IN EXCESS OF 3000 KG FOR A SINGLE SHIPMENT

SECTION 15 – REGULATORY INFORMATION


SECTION 313: This product contains the following substances subject to the reporting requirements of Section 313 of TITLE III of Superfund Amendments and Reauthorization Act of 1986 and CFR Part 372: Methylene chloride.

V.O.C.: 3.49 Lbs/Gal. (SCAQMD Rule 1168)
418 G/L
VHAP: 2.57 lbs/lb solids

HAZARD INDEX:  
0: Minimal Hazard  
1: Slight Hazard  
2: Moderate Hazard  
3: Serious Hazard  
4: Severe Hazard

HMIS RATINGS:  
HEALTH: .................................2  
FLAMMABILITY: ......................2  
REACTIVITY: ..........................1  
PERSONAL PROTECTION......Depends on application and ventilation.  
TSCA:.................................Components of this product are listed on the TSCA inventory.

WHMIS INFORMATION:  
Class A - Compressed gas  
Class B, Division 5 - Flammable aerosols  
Class D, Division 1, Subdivision B - Toxic material  
Class D, Division 2, Subdivision A - Very toxic  
Class D, Division 2, Subdivision B - Toxic, Eye and skin irritant

AEROSOL CLASSIFICATION:  
Level 3 Aerosol

SECTION 16 – OTHER INFORMATION

Version No. 11

All employees or contractors, etc., who use this product must have access to this Material Safety Data Sheet.

PREPARED BY: Helmitin Inc. Laboratory (SG)

SECTION 17 – DEFINITIONS

ACGIH : American Conference of Governmental Industrial Hygienists.  
ASPIRATION HAZARD: The danger of drawing material into the lungs, leading to an inflammatory response that can be fatal.  
CARCINOGEN: A material that either causes cancer in humans, or is considered capable of causing cancer in humans.  
COMBUSTIBLE: A term used to classify certain materials with low flash points that ignite easily. For OSHA it has a flash point greater than 100°F (38°C) but below 200°F (93°C).  
DOT: U.S. Dept. of Transportation.  
FLAMMABLE: A material that gives off vapours that readily ignite at room temperatures. OSHA defines flammable as a material with a flash point less than 100°F (38°C).  
FLASH POINT: The lowest point at which a liquid gives off sufficient vapour to form an ignitable mixture with air.  
HAZARDOUS: Any substance or mixture of substances having properties capable of producing adverse effects on the health or safety of a human.  
IARC: International Agency for Research on Cancer.  
IRRITANT: A substance capable of causing an inflammatory effect on living tissue by chemical action at the site of contact.  
LD50: Lethal Dose 50. The single dose of a substance that causes death of 50% of an animal population from exposure to the substance from any route other than inhalation.
LEL: Lower Explosive Limit. The lowest concentration of vapour that burns or explodes when an ignition source is present at ambient temperatures.
LFL: Lower Flammable Limit. See L.E.L.
MSHA: Mine Safety and Health Administration (U.S.).
NIOSH: National Institute of Occupational Safety and Health (U.S.).
NTP: National Toxicology Program (U.S.).
OECD: Organisation for Economic Co-operation and Development.
OSHA: The Occupational Safety and Health Administration (U.S.).
PEL-STEL: Permissible Exposure Limit, Short Term Exposure Limit.
SCBA: Self-contained breathing apparatus.
SYSTEMIC TOXICITY: Adverse effects induced by a substance which affects the body in a general manner rather than locally.
TDG: Transportation of Dangerous Goods (Canada).
TLV-TWA: Threshold Limit Value, Time Weighted Average.
TSCA: Toxic Substance Control Act.
TOXIC: Any chemical or material that has evidence of an acute or chronic health hazard and is listed in the NIOSH Registry of Toxic Effects of Chemical Substances.
VHAP: Volatile Hazardous Air Pollutant