

MATERIAL SAFETY DATA SHEET
Emergency Phone: Chemtrec 800-424-9300

1. Product Identification

Product Name: IM.G220 Pressure Sensitive Adhesive
Description: Solvent Based Aerosol Adhesive

2. Hazardous Ingredients

<u>Hazardous Components</u>	<u>Chemical Identity</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>Other Limits Recommended %</u>
Hydrocarbon Propellant	CAS# 68476-86-8	1000 PPM	1000 PPM	
Propylene Oxide	CAS# 75-56-9	100 PPM	20 PPM	
Methylene Chloride	CAS# 75-09-2	25 PPM	50 PPM	

3. Physical-Chemical Characteristics

Appearance: Clear, Amber Liquid
Boiling Point: 104°F
Evaporation Point: 14.500 (Butyl Acetate = 1)
Melting Point: N/A
Odor: N/A
Solubility in Water: Negligible
Specific Gravity: 0.979
Vapor Density: 2.93
Vapor Pressure: 70
Working Temperatures 50°F – 100°F

4. Fire and Explosion Hazard Data

Flash Point: -156°F
LEL: 1.8%
UEL: 23%

Extinguishing Media: Water, fog, carbon dioxide, dry chemical

Special Fire Fighting Procedures: Wear a self-contained breathing apparatus with a full face piece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Water may be used to keep fire-exposed containers cool to prevent pressure build-up and possible auto ignition or explosion when exposed to extreme heat. Avoid spreading burning liquids with water used for cooling purposes. In case of container rupture, ventilate area to prevent propellant vapor concentrations from reaching flammable levels. Fire protection and fire response strategy should be planned through consultation with local fire protection authorities or appropriate specialists.

Unusual Fire and Explosion Hazards: This product contains non-flammable chlorinated solvent and extremely flammable propellant. Material is highly volatile and vapors are heavier than air. Vapors will accumulate readily and propellant vapors may ignite explosively. Vapors may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations distant from material handling point. Container contents under pressure. Exposure of container to high temperatures may cause container to burst releasing the highly flammable propellant. Exposure of container to fire conditions may cause container to explode with product ignition. This product should not be used where inadequate ventilation is likely of where vapor concentrations may become flammable. Although Methylene Chloride has no flash point or fire point when tested by conventional means, vapors concentrated in a confined or poorly ventilated area can be ignited upon contact with a spark, flame, or other ignition source. This can occur at vapor concentrations ranging from 13% to 23% by volume in air.

5. Stability and Reactivity

Stability: Stable
Incompatibility: Strong acids, bases, oxidizing agents, Amines, and reactive metals such as aluminum powders, magnesium powders, zinc powders, alkali metals such as sodium and potassium.
Hazardous Decomposition or Byproducts: Carbon monoxide, carbon dioxide, acrid smoke and fumes, hydrogen chloride, small amounts of phosgene and chlorine, various hydrocarbons, and other unidentified organic compounds and toxic substances.
Conditions to Avoid: Open flame, welding arcs, or other high temperature sources that induce thermal decomposition to irritating and corrosive hydrogen bromide from solvent vapor. High energy sources such as welding arcs, can cause degradation generating bromine, hydrogen bromide and should be avoided. Avoid contamination with water that can cause hydrolysis, producing corrosive hydrochloric acid. Prolonged contact with water while in the container may result in corrosion of the container. Avoid prolonged contact with or storage in aluminum or its alloys.

6. Health Hazard Data

Health Hazards-

Eyes: Can cause irritation. Symptoms may include stinging, burning, tearing, redness and swelling
Skin Contact: Can cause irritation. Symptoms may include redness, burning, drying, inflammation (dermatitis), and burns. Material may be absorbed through the skin from prolonged contact.
Inhalation: Can cause irritation of nose, throat, and airways. High concentrations may cause central nervous system depression with symptoms of dizziness, headache, nausea, and confusion. (VOC content: 3.53#/gal. Or 424 grams/liter)
Ingestion: Can cause irritation of the mouth, throat, and gastrointestinal tract. Symptoms may include abdominal pain, nausea, vomiting, and diarrhea. Aspiration of material into the lungs may cause chemical pneumonitis that can be fatal.

Effects of Chronic Overexposure-

Reports have associated repeated and prolonged occupational overexposure to organic solvents with various neurotoxic effects including permanent brain and nervous system damage. Symptoms include loss of memory, loss of intellectual ability and loss of coordination. Chronic skin exposure to solvents may cause similar effects. Intentional misuse by deliberately concentrating and inhaling the contents of this product may be harmful or fatal. Overexposure to methylene chloride can raise the level of carbon monoxide in the blood causing cardiovascular stress. Overexposure to methylene chloride has been suggested as a cause of the following effects in laboratory animals: kidney damage, liver damage. Pre-existing disorders of the following organs (or organ systems) may be aggravated by exposure to methylene chloride: liver, kidney and any pre-existing condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias. Methylene chloride has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain. Chronic exposure to hydrocarbon propellant may cause dizziness, weakness, peripheral numbness, and nervousness.

Carcinogenicity-

NIP: 2B
LARC Monographs: 2A
OSHA Regulated: No

This product contains the following components in quantities greater than or equal to 0.1% by weight that are listed as proven or suspect carcinogens by LARC, NTP or OSHA: Methylene chloride has been shown to cause cancer in laboratory animals and has been listed as a possible human carcinogen by LARC and as a substance that "may reasonably be anticipated to be a carcinogen" by NTP. Propylene oxide has been listed as a probable human carcinogen by the LARC based upon sufficient evidence from laboratory animal test data. The NTP has listed propylene oxide as a substance that "may reasonably be anticipated to be a carcinogen."

Emergency and First Aid Procedures-

Eyes: Flush eyes gently with water for at least 15 minutes while holding eyelids apart. Get medical attention.
Skin Contact: Wash exposed skin area with soap and water. Consult physician if irritation persists. Launder contaminated clothing before reuse.
Inhalation: Remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, begin artificial respiration. Seek immediate medical attention.

Ingestion: Do not induce vomiting. Seek immediate medical attention.

7. Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled-

Eliminate all ignition sources such as flames (including pilot lights), electrical sparks, etc. Stop spill at source. Contain spilled liquid with sand, earth, vermiculite or other inert absorbent material. This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and other bodies of water. If run-off occurs, notify authorities as required. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Depending on the size of the spill, pump or vacuum transfer spilled product to clean container for recovery and transfer contaminated absorbent to appropriately marked waste container for disposal.

Waste Disposal Method-

Dispose of in accordance with Federal, State and Local Regulations.

Precautions to Be Taken in Handling and Storage-

Handle with reasonable care. Avoid breathing vapors and spray mist. Avoid eye contact and repeated or prolonged skin contact. Do not spray near heat, sparks or open flames. Do not smoke while using product. Keep work area ventilated during use and until vapors are all gone. Do not transfer product to unmarked container. Keep out of the reach of children. For industrial use only. Vapors of this product are heavier than air and will collect in low areas such as pits, degreasers, storage tanks, and other confined areas. Do not enter these areas where vapors of this product are suspected unless special breathing apparatus is used and an observer is present for assistance. Containers of this material may be hazardous when emptied. Because emptied containers retain product residues (vapor, liquid and/or solid), all hazard precautions given in the data sheet must be observed. Do not dispose of empty containers in trash compactor. Keep product containers cool, dry and away from sources of ignition. Use and store this product with adequate ventilation. Keep product containers tightly closed when not in use. Contents under pressure. Do not store above 120°F. Exposure to excessive heat could cause bursting of container. Avoid prolonged exposure to sunlight or heat from radiators, stoves, hot water and other heat sources. Containers should be stored in a flammable liquid area in accordance with OSHA and NFPA. Do not puncture or incinerate container. Do not use deformed containers as they may explode with violent force. Cool overheated containers, if possible. Product may corrode, degrade, or otherwise react with some metals and plastics upon prolonged contact. Consult with equipment supplier for proper construction materials for storage tanks, mixers, fittings, pipes and other storage and handling equipment.

8. Control Measures

Eye Protection: Chemical splash goggles are advised. Consult with safety representative. Readily accessible eyewash stations and safety showers in work areas are recommended.

Skin Protection: The use of chemical resistant gloves is recommended (consult with safety equipment supplier). If necessary, wear impervious clothing and boots.

Respiratory Protection: If the TLV or PEL for the product or any component is exceeded in the workplace air, a NIOSH-OSHA approved respirator is advised. Engineering controls should be implemented to reduce exposure. See 29 CFR 1910.1052 for specific OSHA requirements for employee exposure to methylene chloride.

Ventilation: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure levels.