

SAFETY DATA SHEET

ITW Polymers Sealants

Date Issued : 1/8/2014
MSDS No : 70-GP1 Canister
Date Revised : 1/8/2014
Revision No : 13

MIRACLE PF2001 Spray Adhesive

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MIRACLE PF2001 Spray Adhesive

MANUFACTURER

ITW Polymers Sealants North America
 56 Air Station Industrial Park
 Rockland, MA 02370

Service Number: (781) 878-7015

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (US Transportation): (800) 424-9300

COMMENTS: MIRACLE is a registered trademark of Illinois Tool Works, Inc.

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: DANGER! Poison. Extremely flammable vapor. Vapors may cause flash fire and explosion. Contents under pressure. Harmful or fatal if swallowed. Vapors may cause dizziness, headache, nausea, drowsiness, unconsciousness and respiratory irritation. Contains methylene chloride which is harmful if inhaled. Can also cause skin and eye irritation. Methylene Chloride is a possible cancer hazard. May cause cancer based on animal data.

POTENTIAL HEALTH EFFECTS

EYES: Can cause moderate to severe eye irritation with temporary damage possible.

SKIN: Prolonged or repeated contact of liquid can cause irritation, defatting of skin, and dermatitis. Prolonged single exposure can result in a progressively severe burning sensation or redness.

SKIN ABSORPTION: Can be absorbed through the skin but not in sufficient amounts to cause adverse effects.

INGESTION: Low toxicity if swallowed. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Aspiration into the lungs may occur during ingestion or vomiting, resulting in rapid absorption and injury to other body systems.

INHALATION: Inhalation is the major potential route of exposure. Exposure to high concentrations of vapor or mist can cause central nervous system depression with symptoms of headache, dizziness, stupor, loss of consciousness or death depending on concentration and duration of exposure. Exposure to high concentrations can cause irregular heartbeat, cardiac arrest and death. Overexposure has been shown to cause adverse effects on the lungs, liver, kidney, nervous system and internal organs. Carboxyhemoglobin levels can be elevated in persons exposed to methylene chloride and can cause a substantial stress on the cardiovascular system.

CARCINOGENICITY: Methylene chloride has caused cancer in certain laboratory animal tests. IARC has classified methylene chloride in Group 2B as a substance considered possibly carcinogenic to humans. Methylene chloride appears on the NTP carcinogen list.

MEDICAL CONDITIONS AGGRAVATED: Alcoholism, acute and chronic liver and kidney disease, chronic lung disease, anemia, coronary disease or rhythm disorders of the heart. Exposure can result in cardiac sensitization and increase the risk of cardiac arrest.

ROUTES OF ENTRY: Inhalation is the major potential route of entry.

CANCER STATEMENT: Methylene chloride has caused cancer in certain laboratory animal tests. IARC has classified methylene chloride in Group 2B as a substance considered possibly carcinogenic to humans. Methylene chloride appears on the NTP carcinogen list.

IRRITANCY: Slight to moderate eye and skin irritation.

SAFETY DATA SHEET

ITW Polymers Sealants

Date Issued : 1/8/2014
 MSDS No : 70-GP1 Canister
 Date Revised : 1/8/2014
 Revision No : 13

MIRACLE PF2001 Spray Adhesive

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Dichloromethane	45 - 70	75-09-2
Hydrocarbon Propellant	25 - 50	Mixture

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of tempered water (at least 15-20 minutes) lifting upper and lower eye lids occasionally. Get immediate medical attention.

SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Thoroughly wash or discard clothing and shoes before reuse.

INGESTION: Do not induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Causes eye irritation.

SKIN: Mild to moderate skin irritant.

SKIN ABSORPTION: Can be absorbed through the skin but not in sufficient amounts to cause adverse effects.

INGESTION: Single dose toxicity low to moderate.

INHALATION: Exposure to high concentrations of vapor or mist can cause central nervous system depression with symptoms of headache, dizziness, stupor, loss of consciousness or death depending on concentration and duration of exposure. Exposure to high concentrations can cause irregular heartbeat, cardiac arrest and death. Overexposure has been shown to cause adverse effects on the lungs, liver, kidney, nervous system and internal organs.

CHRONIC EFFECTS: Prolonged overexposure has caused toxic effects on the liver and kidneys.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Class IA

GENERAL HAZARD: Flammable

EXTINGUISHING MEDIA: Water spray, carbon dioxide, dry chemical or foam.

HAZARDOUS COMBUSTION PRODUCTS: Hydrogen chloride, carbon monoxide, carbon dioxide, and trace amounts of phosgene and chlorine

FIRE FIGHTING PROCEDURES: Concentrated vapors can be ignited by a high intensity energy source. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Use water spray to keep fire exposed containers cool. Extinguish using an agent suitable for surrounding fire. Firefighters should wear self-contained breathing apparatus with pressure demand, full face piece SCBA (MSHA/NIOSH approved or equivalent) and full protective gear.

SENSITIVE TO STATIC DISCHARGE: Not Applicable

SENSITIVITY TO IMPACT: None known.

SAFETY DATA SHEET

ITW Polymers Sealants

Date Issued : 1/8/2014
MSDS No : 70-GP1 Canister
Date Revised : 1/8/2014
Revision No : 13

MIRACLE PF2001 Spray Adhesive

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride and trace amounts of phosgene and chlorine.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. After all visible traces, including ignitable vapors, have been removed, thoroughly wet vacuum the area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Only those persons who are adequately trained, authorized, and wearing the required personal protective equipment (PPE) should participate in spill response and clean-up.

LARGE SPILL: Keep spectators away. Only those persons who are adequately trained, authorized and wearing the required personal protective equipment (PPE) should participate in spill response and clean-up. Know and prepare for spill response before using or handling this product. Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to covered and labeled containers for disposal. Use appropriate PPE. Place absorbent diking materials in covered containers for disposal. Prevent contamination of sewers, streams, and groundwater with spilled material or used absorbent.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: For professional or industrial use only. Follow label instructions. Keep out of the reach of children. Not for consumption. No smoking. Do not breathe vapors. Avoid contact with body. Turn off all pilot lights, flames, stoves, heaters, electric motors, welding equipment and other sources of ignition. Empty containers must not be washed and re-used for any purpose. Contact lens wearers must wear protective eye wear around chemical vapors and liquid. Wash hands thoroughly after handling. Flammable vapors may cause flash fire or ignite explosively. To prevent build-up of vapors, use adequate natural and/or mechanical ventilation (e.g. open all windows and doors to achieve cross ventilation). Containers may be hazardous when empty. Never use welding or cutting torch on or near container. Do not cut, drill, grind, or expose containers to heat, sparks, static electricity or other source of ignition. Explosion may occur causing injury or death.

HANDLING: Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Follow all SDS/label precautions even after container is emptied because they may retain product residues.

STORAGE: Keep container closed when not in use. Store in a dry well ventilated area, out of the sun and away from ignition sources. Do not remove or deface label. Prevent water or moist air from entering container.

STORAGE TEMPERATURE: 15.5°C (60°F) Minimum to 35°C (95°F) Maximum

SHELF LIFE: 1 year from manufacture date

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

SAFETY DATA SHEET

ITW Polymers Sealants

Date Issued : 1/8/2014
 MSDS No : 70-GP1 Canister
 Date Revised : 1/8/2014
 Revision No : 13

MIRACLE PF2001 Spray Adhesive

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³
Dichloromethane	TWA	25 ppm	NL	50 ppm	174 mg/m ³
	STEL	125 ppm	NL	NL [1]	NL [1]
Hydrocarbon Propellant	TWA	1000 ppm	1800 mg/m ³	800 ppm	NL
	STEL	NL [1]	NL [1]	NL [1]	NL [1]
Footnotes: 1. NL = Not Listed					

ENGINEERING CONTROLS: Provide sufficient explosion proof mechanical (general and/or local exhaust) ventilation to maintain exposure below the occupational exposure limit and exposure concentration. Use only in a well ventilated area. Ground and bond all equipment.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields. A face shield may be necessary if spraying the product.

SKIN: Wear chemical resistant gloves such as Viton, PVA or equivalent. Wear chemical protective clothing & boots to prevent repeated or prolonged skin contact.

RESPIRATORY: Where vapor concentrations exceed or are likely to exceed the occupational exposure limits, a NIOSH approved continuous flow supplied air respirator, hood or helmet is recommended. A NIOSH approved self-contained positive pressure breathing apparatus with full face piece is required for spills and/or emergencies.

WORK HYGIENIC PRACTICES: Wash hands thoroughly after use.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Mildly sweet odor

ODOR THRESHOLD: Not Determined

COLOR: Green

pH: Not Determined

PERCENT VOLATILE: 81.1

Notes: by weight

FLASHPOINT AND METHOD: -91.2°C (-132.2°F) to -104°C (-156°F) CC

FLAMMABLE LIMITS: 1.8 to 9.5

SAFETY DATA SHEET**ITW Polymers Sealants**

Date Issued : 1/8/2014
MSDS No : 70-GP1 Canister
Date Revised : 1/8/2014
Revision No : 13

MIRACLE PF2001 Spray Adhesive

AUTOIGNITION TEMPERATURE: (788°F) to (1033°F)
VAPOR PRESSURE: Not Determined
VAPOR DENSITY: Not Determined
BOILING POINT: 39.8°C (104°F)
FREEZING POINT: Not Determined
MELTING POINT: Not Determined
POUR POINT: Not Determined
SOLUBILITY IN WATER: Not Determined
EVAPORATION RATE: < 1.0 (n-Butyl Acetate=1)
DENSITY: 12.0 lbs/gal
PARTICLE SIZE: Not Determined
SPECIFIC GRAVITY: 0.872
VISCOSITY: Not Determined
MOLECULAR WEIGHT: Not Determined
(VOC): 394.900 gr/L EPA Method 24 VOC
Notes: Photochemically Reactive Only VOC: 261.6 gr/L
COEFF. OIL/WATER: Not Determined
OXIDIZING PROPERTIES: Not Determined
COMMENTS: 2.71 lb VHAP/lb Solid
 51.1% by weight HAP

10. STABILITY AND REACTIVITY

STABLE: Yes
HAZARDOUS POLYMERIZATION: No
STABILITY: Stable.
POLYMERIZATION: Product will not undergo polymerization.
CONDITIONS TO AVOID: Avoid contact with open flame, electric arcs, or other hot surfaces which can cause thermal decomposition.
POSSIBILITY OF HAZARDOUS REACTIONS: None Expected.
HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride and trace amounts of phosgene and chlorine.
INCOMPATIBLE MATERIALS: Strong alkalis, oxygen, nitrogen peroxide, sodium, potassium, and other oxidizers and reactive metals.

11. TOXICOLOGICAL INFORMATION**ACUTE**

SAFETY DATA SHEET

ITW Polymers Sealants

Date Issued : 1/8/2014
MSDS No : 70-GP1 Canister
Date Revised : 1/8/2014
Revision No : 13

MIRACLE PF2001 Spray Adhesive

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Dichloromethane	985 to 1600 mg/kg	> 2000 mg/kg	52 mg/L (4- hr dose)
Hydrocarbon Propellant	No data	No data	No data

CHRONIC: Adverse effects on the liver and kidneys have been reported on laboratory animals. The finding of chronic toxic effects in laboratory animals may indicate toxicity to humans.

CARCINOGENICITY

Chemical Name	NTP Status	IARC Status	OSHA Status
Dichloromethane	2	2B	X

IARC: Group 2B Animal Carcinogen

NTP: Animal Carcinogen

Notes: This product contains methylene chloride, a chemical known to the State of California to cause cancer.

IRRITATION: Mild to moderate eyes and skin irritation.

REPRODUCTIVE EFFECTS: Laboratory animal studies on mice, rats and rabbits have been conducted to evaluate the potential reproductive and developmental effects of methylene chloride exposures. Methylene chloride exposure has not been shown to cause teratogenic effects (birth defects) in experimental animals.

MUTAGENICITY: Methylene chloride has been evaluated for its potential to induce genotoxic effects in both in vivo and in vitro systems with mixed results. Based on this evidence, methylene chloride exposure may be considered to be a weak mutagen in mammalian systems.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Methylene chloride is expected to evaporate rapidly from both water and near-surface soil.

ECOTOXICOLOGICAL INFORMATION: Contains components that are potentially toxic to freshwater and saltwater ecosystems.

BIOACCUMULATION/ACCUMULATION: Contains components with the potential to bio-accumulate.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in accordance with all local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Liquified Gas, Flammable, N.O.S.

TECHNICAL NAME: Contains (Dichloromethane, Isobutane)

PRIMARY HAZARD CLASS/DIVISION: 2.1

UN/NA NUMBER: 3161

PACKING GROUP: NA

NAERG: 115

SAFETY DATA SHEET

ITW Polymers Sealants

Date Issued : 1/8/2014
MSDS No : 70-GP1 Canister
Date Revised : 1/8/2014
Revision No : 13

MIRACLE PF2001 Spray Adhesive

MARINE POLLUTANT #1: None

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Flammable
Gas

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: Yes **PRESSURE GENERATING:** Yes **REACTIVITY:** No **ACUTE:** No **CHRONIC:** Yes

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt. %	CAS
Dichloromethane	45 - 70	75-09-2

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt. %	CERCLA RQ
Dichloromethane	45 - 70	2200 kg

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Dichloromethane	75-09-2
Hydrocarbon Propellant	Mixture

CLEAN AIR ACT

Chemical Name	Wt. %	CAS
Dichloromethane	45 - 70	75-09-2

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Dichloromethane	New Jersey Right to Know List Pennsylvania Right to Know List Massachusetts Toxic Use Reduction Act (TURA) Reportable Chemical
Hydrocarbon Propellant	New Jersey Right to Know List Pennsylvania Right to Know List

CALIFORNIA PROPOSITION 65

SAFETY DATA SHEET

ITW Polymers Sealants

Date Issued : 1/8/2014
 MSDS No : 70-GP1 Canister
 Date Revised : 1/8/2014
 Revision No : 13

MIRACLE PF2001 Spray Adhesive

Chemical Name	Wt.%	Listed
Dichloromethane	45 - 70	Cancer

CANADA

WHMIS HAZARD SYMBOL AND CLASSIFICATION



Compressed
Gas



Flammable
Gas



Poison

16. OTHER INFORMATION

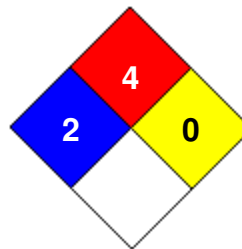
INFORMATION CONTACT: (781) 878-7015

REVISION SUMMARY: This MSDS replaces the 11/7/2012 MSDS. Revised: **Section 1:** Date Issued. **Section 16:** MANUFACTURER DISCLAIMER.

HMIS RATING

HEALTH	<input type="checkbox"/>	2
FLAMMABILITY	<input type="checkbox"/>	4
PHYSICAL HAZARD	<input type="checkbox"/>	0
PERSONAL PROTECTION	<input type="checkbox"/>	B

NFPA CODES



GENERAL STATEMENTS: Keep out of reach of children
 For professional or industrial use only

MANUFACTURER DISCLAIMER: To the best of our knowledge, the information contained in this SDS is accurate. It is intended to assist the user in his/her evaluation of the product's hazards and safety precautions to be taken in its use. The data in this SDS relate only to the specific material designated herein. We do not assume liability for the use of, or reliance on this information, nor do we guarantee its accuracy or completeness.

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of ITW Polymers Sealants North America. The data on this sheet relates only to the specific material designated herein. ITW Polymers Sealants North America assumes no legal responsibility for use or reliance upon these data.