

# MATERIAL SAFETY DATA SHEET

DirectLine Industries • PO Box 15133, St. Louis, MO 63110 • (866) 773-6136

**24 Hour Emergency Telephone: (800) 255-3924 (Chem-Tel)**

THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (THE HAZARD COMMUNICATION STANDARD)

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## SECTION 1 - PRODUCT IDENTIFICATION

**Product Trade Name** ..... : **3X ENCAPSULATOR**  
**Product Code** ..... : (Gloss Black) / (Satin Black)  
**Product Class** ..... : Paint  
**Shipping Classification** ..... : Paint - Combustable Liquid  
**DOT Hazard Classification** ..... : 2 (FLAMMABLE LIQUID)

## SECTION 2 - HAZARDOUS INGREDIENTS

INGREDIENT NAME /CAS NUMBER	EXPOSURE LIMITS	CONCENTRATION (%)
Polyisocyanate based on MDI ..... Specific chemical identity is withheld as a trade secret.	OSHA: Not Established ACGIH: Not Established	35 - 75 %
Diphenylmethane Diisocyanate (MDI) (2,2; 2,4) ..... 26447-40-5	OSHA: Not Established ACGIH: Not Established	< 1 %
Non-isomer specific CAS number includes 2,2' MDI and 2,4' MDI.		
4, 4' - Diphenylmethane Diisocyanate (MDI) ..... 101-68-8	OSHA: .020 ppm Ceiling .200 mg/m3 Ceiling ACGIH: .005 ppm TWA .051 mg/m3 TWA	1 - 25 %
Aromatic 100 (Solvent Naphtha) ..... 64742-95-6	OSHA: Not Established ACGIH: Not Established Supplier: 50,000 ppm	15 - 40 %
Propylene Glycol Monomethyl Ether Acetate (PMA) ..... 108-65-6	OSHA: Not Established ACGIH: Not Established	1 - 20 %
Exposure limits of 100 ppm TWA (150 ppm STEL) are recommended based on similarity to propylene glycol monomethyl ether.		

## SECTION 3 - PHYSICAL PROPERTIES

<b>PHYSICAL FORM</b> ..... : Liquid	<b>SOLUBILITY IN WATER</b> ..... : Product is insoluble - reacts slowly with water to liberate CO2 gas.
<b>COLOR</b> ..... : Black	<b>SPECIFIC GRAVITY</b> ..... : 1.07 @ 68 F (20 C)
<b>ODOR</b> ..... : of Solvent	<b>BULK DENSITY</b> ..... : 8.90 lbs/gal
<b>BOILING POINT</b> ..... : Not established	<b>% VOLATILE BY VOLUME</b> ..... : Approximately 29%
<b>MELTING/FREEZING POINT</b> ..... : Not established	<b>VAPOR PRESSURE</b> ..... : Not established

## SECTION 4 - FIRE AND EXPLOSION DATA

**FLASH POINT** ..... : 108° F (43.2 C) Setaflash (ASTM D-3243, D-3278, D-3828)  
**FLAMMABLE LIMITS:**  
**UPPER EXPLOSIVE LIMIT (UEL) (%)** ..... : 6.0% AR100  
**LOWER EXPLOSIVE LIMIT (LEL) (%)** ..... : 0.9% AR100  
**EXTINGUISHING MEDIA** ..... : Dry Chemical; Carbon Dioxide; Foam; Water spray for large fires.  
**SPECIAL FIRE FIGHTING PROCEDURES** ..... : Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by firefighters. During a fire, MDI vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. (See Section VIII). At temperatures greater than 400 F (204 C), polymeric MDI can polymerize and decompose which can cause pressure build-up in closed containers. Explosive rupture is possible. Therefore, use cold water to cool fire-exposed containers.

## SECTION 5 - HUMAN HEALTH DATA

**ROUTE(S) OF ENTRY** ..... : Inhalation; Skin Contact; Eye Contact.  
**HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE:**  
**ACUTE INHALATION** ..... : MDI vapors or mist at concentrations above the TLV can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). Persons with a preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV with similar symptoms as well as asthma attack. Exposure well above the TLV may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). These effects are usually reversible. Chemical or hypersensitive pneumonitis, with flu-like symptoms (e.g., fever, chills) has also been reported. These symptoms can be delayed up to several hours after exposure.  
**CHRONIC INHALATION** ..... : As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the TLV or MGL. These symptoms, which include: chest tightness, wheezing, cough, shortness of breath or asthmatic attack, could be immediate or delayed up to several hours after exposure. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Chronic overexposure to isocyanates has also been reported to cause lung damage, including decrease in lung function, which may be permanent. Sensitization may be either temporary or permanent. Chronic exposure to organic solvents has been associated with various neurotoxic effects including permanent brain and nervous system damage. Symptoms include: loss of memory, loss of intellectual ability and loss of coordination.

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## SECTION 5 - HUMAN HEALTH DATA - Continued

**ACUTE SKIN CONTACT**.....: Isocyanates react with skin protein and moisture and can cause irritation. Symptoms of skin irritation may be reddening, swelling, rash, scaling or blistering. Some persons may develop skin sensitization from skin contact. Cured material is difficult to remove. Repeated or prolonged skin contact with solvents can result in dry, defatted and cracked skin causing increased susceptibility to infection. In addition, skin irritation (i.e. redness, swelling), which may develop into dermatitis, may occur from skin contact. Solvents can penetrate the skin and may cause systemic effects similar to those identified under acute inhalation symptoms.

**CHRONIC SKIN CONTACT**.....: Prolonged contact can cause reddening, swelling, rash, scaling or blistering. In those who have developed a skin sensitization, these symptoms can develop as a result of contact with very small amounts of liquid material or even as a result of vapor-only exposure. Chronic skin exposure to solvents may cause effects similar to those identified under chronic inhalation effects. Animal tests have indicated that respiratory sensitization can result from skin contact with MDI. This data reinforces the need to prevent direct skin contact with MDI. (See Section XII Animal Toxicity Data, SENSITIZATION.)

**ACUTE EYE CONTACT**.....: Liquid, aerosols and vapors of this product (isocyanate and solvents) are irritating and can cause tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes. If left untreated, Corneas damage can occur and injury is slow to heal. However, damage is usually reversible. See Section VI for treatment.

**CHRONIC EYE CONTACT**.....: Prolonged vapor contact may cause conjunctivitis.

**ACUTE INGESTION**.....: Can result in irritation and possible corrosive action in the mouth, stomach tissue and digestive tract. Vomiting may cause aspiration of the solvent resulting in chemical pneumonitis.

**CHRONIC INGESTION**.....: None Determined

**CARCINOGENICITY:** Neither MDI nor polymeric MDI are listed by the NTP, IARC or regulated by OSHA as carcinogens.

**NTP**.....: Not listed

**IARC**.....: Not listed

**OSHA**.....: Not regulated

**OTHER**.....: See results of two year inhalation study in Section XII Animal Toxicity Data, CARCINOGENICITY.

### MEDICAL CONDITIONS

**AGGRAVATED BY EXPOSURE**.....: Asthma, other respiratory disorders (bronchitis, emphysema, bronchial hyperreactivity), skin allergies, eczema.

**EXPOSURE LIMITS**.....: Exposure limits have not been established for this product. Use the exposure limits in Section II of the MSDS for MDI:

OSHA PEL: 0.02 ppm Ceiling (MDI). ACGIH TLV: 0.005 ppm (0.051 mg/m3) Time Weighted Average (TWA).

## SECTION 6 - EMERGENCY AND FIRST AID PROCEDURES

**FIRST AID FOR EYES**.....: Flush with clean, lukewarm water (low pressure) for at least 15 minutes, while lifting eyelids. Refer individual to physician or ophthalmologist for immediate follow-up.

**FIRST AID FOR SKIN**.....: Remove contaminated clothing immediately. Wash affected areas thoroughly with soap and water. Wash contaminated clothing thoroughly before reuse. For severe exposures, get under safety shower after removing clothing, then get medical attention. For lesser exposures, seek medical attention if irritation develops or persists after the area is washed.

**FIRST AID FOR INHALATION**.....: Move to an area free from risk of further exposure. Administer oxygen or artificial respiration as needed. Obtain medical attention. Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours. Treatment is essentially symptomatic. Consult physician.

**FIRST AID FOR INGESTION**.....: DO NOT INDUCE VOMITING. Give 1 to 2 cups of milk or water to drink. DO NOT GIVE ANYTHING BY MOUTH TO AN

UNCONSCIOUS OR CONVULSING PERSON. Consult physician.

**NOTE TO PHYSICIAN**.....: **EYES:** Stain for evidence of corneal injury. If cornea is burned, instill antibiotic/steroid preparation frequently. Workplace vapors could produce reversible corneal epithelial edema impairing vision. **SKIN:** This product is a known skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn. **INGESTION:** Treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of the product.

**INHALATION:** This product is a known pulmonary sensitizer. Treatment is essentially symptomatic. An individual having a dermal or pulmonary sensitization reaction to this material must be removed from any further exposure to any isocyanate.

## SECTION 7 - EMPLOYEE PROTECTION RECOMMENDATIONS

### REQUIRED WORK/

**HYGIENE PROCEDURES**.....: Precautions must be taken so that persons handling this product do not breathe the vapors or have it contact the eyes or skin. In spray operations, protection must be afforded against exposure to both vapor and spray mist.

**EYE PROTECTION REQUIREMENTS**.....: Liquid chemical goggles. Vapor resistant goggles should be worn when contact lenses are in use. In a splash hazard environment chemical goggles should be used in combination with a full face-shield.

**SKIN PROTECTION REQUIREMENTS**.....: Permeation resistant gloves (butyl rubber, nitrile rubber, polyvinyl alcohol). However, please note that PVA degrades in water. Cover as much of the exposed skin area as possible with appropriate clothing. If skin creams are used, keep the area covered by the cream to a minimum.

**RESPIRATOR REQUIREMENTS**.....: Concentrations greater than the TLV can occur when MDI is sprayed, heated or used in a poorly ventilated area. In such cases, or whenever concentrations of MDI exceed the TLV, respiratory protection must be worn. A positive pressure, supplied-air respirator or a self-contained breathing apparatus is recommended. In situations where MDI is not sprayed, heated, or used in a poorly ventilated area, and a supplied-air or self-contained breathing apparatus is unavailable or its use impractical, at least an air-purifying respirator equipped with an organic vapor cartridge and particulate pre-filters must be worn. HOWEVER, THIS SHOULD BE PERMITTED ONLY FOR SHORT PERIODS OF TIME (LESS THAN ONE HOUR) AT RELATIVELY LOW CONCENTRATIONS (AT OR NEAR THE TLV). However, due to the poor warning properties of MDI, proper fit and timely replacement of filter elements must be ensured. Observe OSHA regulations for respirator use (29 CFR 1910.134).

**NOTE ON ODOR WARNING PROPERTIES**.....: Pure isocyanate materials have odor thresholds that are higher than the TLV, PEL or MGL. Thus, if a vapor/particulate air-purifying respirator has exceeded its service life, breakthrough of the filter can result in exposure over the allowable limit without the wearer being able to smell the isocyanate. However, when a polyurethane coating system contains organic solvents, the wearer of a vapor particulate respirator will be warned of filter breakthrough by the odor of solvents before being exposed to isocyanates because: 1) organic solvents have low odor thresholds, and 2) testing has demonstrated that solvents break through filters before isocyanates do.

**SPRAY APPLICATION**.....: Good industrial hygiene practice dictates that when isocyanate based coatings are spray applied, some form of respiratory protection should be worn. During the spray application of organic solvent containing coatings systems, the use of a positive pressure supplied air respirator is mandatory when: - the airborne isocyanate concentrations are not known, or - spraying is performed in a confined space or in an area with limited ventilation. A properly fitted air-purifying (combination organic vapor and particulate) respirator, proven by test to be effective in isocyanate-containing spray paint environments, will provide adequate protection when: - the airborne MDI monomer concentrations are known to be acceptable.

**NON-SPRAY OPERATIONS**.....: Even during non-spray operations such as mixing, brush or roller application, etc., depending on the conditions (for example, heating of material or application to a hot substrate), it is possible to be exposed to airborne isocyanate vapors. Therefore, when the coatings system contains solvents and will be applied in a non-spray manner, a positive pressure supplied air respirator must be worn.

**VENTILATION REQUIREMENTS**.....: Exhaust ventilation sufficient to keep the airborne concentrations of MDI and polyisocyanate below their respective TLV and MGL must be utilized. Exhaust air may need to be cleaned by scrubber or filters to reduce environmental contamination.

**MONITORING**.....: Refer to Patty's Industrial Hygiene and Toxicology-Volume 1 (3rd edition) Chapter 17 and Volume III (1st edition) Chapter 3- for guidance concerning appropriate air sampling strategy to determine airborne concentrations.

**MEDICAL SURVEILLANCE**.....: Medical supervision of all employees who handle or come in contact with MDI is recommended. This should include preemployment and periodic medical examinations with respiratory function tests (FEV<sub>1</sub>, FVC as a minimum). Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases or recurrent skin eczema or sensitization should be excluded from working with isocyanates. Once a person is diagnosed as being sensitized to isocyanates, no further exposure can be permitted.

**ADDITIONAL PROTECTIVE MEASURES**.....: Safety showers and eyewash stations should be available. Educate and train employees in safe use of product. Follow all label instructions.

## SECTION 8 - REACTIVITY DATA

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**STABILITY** ..... : Stable under normal conditions.  
**HAZARDOUS POLYMERIZATION** ..... : May occur; Contact with moisture or other materials which react with isocyanates or temperatures over 400 F (204 C) may cause polymerization.  
**INCOMPATIBILITIES** ..... : Water, amines, strong bases, alcohols. Will cause some corrosion to copper alloys and aluminum.  
**INSTABILITY CONDITIONS** ..... : Contamination with water.  
**DECOMPOSITION PRODUCTS** ..... : By high heat and fire: carbon dioxide, carbon monoxide, oxides of nitrogen, HCN, MDI.

## SECTION 9 - SPILL AND LEAK PROCEDURES

**SPILL OR LEAK PROCEDURES** ..... : Evacuate nonessential personnel. Remove all sources of ignition and ventilate the area. Notify appropriate authorities if necessary. Put on personal protective equipment (See Section VII). Dike or impound spilled material and control further spillage if feasible. Cover the spill with sawdust, vermiculite, Fuller's earth or other absorbent material. Pour decontamination solution over spill area and allow to react for at least 10 minutes. Collect material in open containers and add further amounts of decontamination solution. Remove containers to a safe place, cover loosely, and allow to stand for 24 to 48 hours. Wash down spill area with decontamination solutions.  
Decontamination solutions: nonionic surfactant Union Carbide's Tergitol TMN-10 (\* 20%) and water (80%); concentrated ammonia (3-8%), detergent (2%) and water (90-95%).  
**WASTE DISPOSAL METHOD** ..... : Waste must be disposed of in accordance with federal, state and local environmental control regulations. Incineration is the preferred method.  
**EMPTY CONTAINER PRECAUTIONS** ..... : Empty containers must be handled with care due to product residue and flammable solvent vapor. Decontaminate containers prior to disposal. DO NOT HEAT OR CUT EMPTY CONTAINER WITH ELECTRIC OR GAS TORCH. (See Section IV and VIII).

## SECTION 10 - SPECIAL PRECAUTIONS & STORAGE DATA

**STORAGE TEMPERATURE(MIN/MAX)** ..... : 32°F (0°C)/104°F (40°C)  
**SHELF LIFE** ..... : 6 months at 77°F (25°C) after receipt of material by customer.  
**SPECIAL SENSITIVITY** ..... : If container is exposed to high heat, 400°F (204°C) it can be pressurized and possibly rupture. MDI reacts slowly with water to form CO<sub>2</sub> gas. This gas can cause sealed containers to expand and possibly rupture.  
**HANDLING/STORAGE PRECAUTIONS** ..... : Keep away from heat sparks and open flame. Store in tightly closed containers to prevent moisture contamination. Do not reseat if contamination is suspected. Avoid contact with skin and eyes. Do not breathe aerosols or vapors. Warning properties (irritation of the eyes, nose and throat or odor) are not adequate to prevent chronic overexposure from inhalation. This material can produce asthmatic sensitization upon either single inhalation exposure to a relatively high concentration or upon repeated inhalation exposures to lower concentrations. Exposure to vapors of heated MDI can be extremely dangerous. Employee education and training in the safe use and handling of this compound are required under the OSHA Hazard Communication Standard.

## SECTION 11 - SHIPPING INFORMATION

<b>TECHNICAL SHIPPING NAME</b> ..... : Paint	<b>UN NUMBER</b> ..... : UN1263
<b>FREIGHT CLASS BULK</b> ..... : Paint	<b>PACKAGING GROUP</b> ..... : III
<b>FREIGHT CLASS PACKAGE</b> ..... : Paint	<b>HAZARD LABEL(s)</b> ..... : Flammable Liquid
<b>PRODUCT LABEL</b> ..... : 3X ENCAPSULATOR	<b>HAZARD PLACARD(s)</b> ..... : Flammable Liquid
<b>DOT (HM-181) (DOMESTIC SURFACE)</b>	<b>ICAO / IATA (AIR)</b>
<b>PROPER SHIPPING NAME</b> ..... : Paint	<b>PROPER SHIPPING NAME</b> ..... : Resin Solution
<b>HAZARD CLASS OR DIVISION</b> ..... : 3	<b>HAZARD CLASS DIVISION NUMBER</b> ..... : 3
<b>UN/NA NUMBER</b> ..... : UN1263	<b>UN NUMBER</b> ..... : UN1866
<b>PACKAGING GROUP</b> ..... : PG III	<b>SUBSIDIARY RISK</b> ..... : None
<b>DOT PRODUCT RQ lbs (kgs)</b> ..... : None	<b>PACKING GROUP</b> ..... : III
<b>HAZARD LABEL(s)</b> ..... : None	<b>HAZARD LABEL(s)</b> ..... : Flammable Liquid
<b>HAZARD PLACARD(s)</b> ..... : Combustible Liquid	<b>RADIOACTIVE ?</b> ..... : Non-Radioactive
<b>IMO / IMDG CODE (OCEAN)</b>	<b>PASSENGER AIR - MAX. QTY.</b> ..... : 60L
<b>PROPER SHIPPING NAME</b> ..... : Paint	<b>PASSENGER INSTRUCTION NUMBER</b> ..... : 309
<b>HAZARD CLASS DIVISION NUMBER</b> ..... : 3.3	<b>CARGO AIR - MAX. QTY.</b> ..... : 220L
	<b>CARGO AIR INSTRUCTION NUMBER</b> ..... : 310

## SECTION 12 - ANIMAL TOXICITY DATA

**TOXICITY DATA FOR** ..... : Diphenylmethane Diisocyanate (Monomeric and Polymeric)  
**ACUTE TOXICITY**  
**ORAL LD50** ..... : Greater than 15,800 mg/kg (Rats). (Based on the results of actual tests conducted using specific HDI-homopolymer products.)  
**DERMAL LD50** ..... : Greater than 7,900 mg/kg (Rabbits)  
**INHALATION LC50** ..... : Approximately 370-490 mg/m<sup>3</sup> for an aerosol of polymeric MDI (Rat 4 Hr.). An LC50 (2 hr.) of greater than 400 mg/m<sup>3</sup> was determined on a dust of monomeric MDI (Rat).  
**EYE EFFECTS** ..... : Moderate irritation . A maximum primary eye irritation score for a polymeric MDI of 12.0/110 (24 hr.) was obtained. This score is fairly typical for a number of MDI products.  
**SKIN EFFECTS** ..... : Moderate irritation. Primary dermal irritation scores are typically below 3.4/8.0 (Draize).  
**SENSITIZATION** ..... : MDI has been shown to produce dermal sensitization in several species (guinea pigs, mice, rabbits and dogs). Intradermal or topical application followed by inhalation challenge have resulted in a respiratory sensitization response in guinea pigs. In addition, there is some evidence to suggest that cross-sensitization between different types of diisocyanates may occur.  
**CHRONIC TOXICITY** ..... : In a chronic inhalation exposure study, rats were exposed to an aerosol of polymeric MDI for 6 hours per day, 5 days per week for a period for two years. The exposure concentrations were 0, 0.2, 1.0 and 6.0 mg/m<sup>3</sup>. Microscopic examination of tissues revealed the effects of irritation to the nasal cavity and lungs in animals exposed to 1.0 and 6.0 mg/m<sup>3</sup>. The No Observable Effect Level (NOEL) was 0.2 mg/m<sup>3</sup>.  
**CARCINOGENICITY** ..... : In the same two year inhalation study described above (See CHRONIC TOXICITY), the occurrence of pulmonary adenomas (benign tumors) and a single pulmonary adenocarcinoma (malignant tumor) was considered to be related to the exposure. These tumors were observed only in rats exposed to the high concentration of 6.0 mg/m<sup>3</sup>.  
**MUTAGENICITY** ..... : Monomeric MDI is positive in the Ames assay (with hepatic microsomal activation). However, it was negative in an in vivo-invitro micronucleus assay.  
**OTHER TOXICITY DATA** ..... : No conclusive evidence has been developed to indicate that MDI is carcinogenic, teratogenic or that it causes reproductive effects in animals or in humans.  
**AQUATIC TOXICITY** ..... : LC50 - 24 hr. (static): Greater than 500 mg/liter for Daphnia magna, Limnea stagnalis, and Zebra fish (Brachydanio rerio) for both polymeric and monomeric MDI.

## SECTION 13 - FEDERAL REGULATORY INFORMATION

**OSHA STATUS** ..... : This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.  
**TSCA STATUS** ..... : On TSCA Inventory

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CERCLA REPORTABLE QUANTITY ..... : None

SARA TITLE III:

SECTION 302 EXTREMELY

HAZARDOUS SUBSTANCES ..... : None

SECTION 311/312

HAZARD CATEGORIES ..... : Immediate Health Hazard; Delayed Health Hazard; Fire Hazard; Reactive Hazard

SECTION 313

TOXIC CHEMICALS ..... : None

RCRA STATUS ..... : When discarded in its purchased form, this product meets the criteria of ignitability, and should be managed as a hazardous waste (EPA Hazardous Waste Number D001). (40 CFR 261.20-24)

## SECTION 14 - OTHER REGULATORY INFORMATION

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

COMPONENT NAME	CAS NUMBER	CONCENTRATION	STATE CODE
Diphenylmethane Diisocyanate (MDI) (2,2; 2,4)	26447-40-5	Less than 1 %	NJ4
Polyisocyanate based on MDI	NJTSRN (31765300002)-5317P	Approx. 53 %	PA3, NJ4
4, 4' - Diphenylmethane Diisocyanate (MDI)	101-68-8	Approx. 15%	PA1, FL, IL, MA, RI, NJ1, NJ4, CN2
Aromatic 100 (Solvent Naphtha)	64742-95-6	Approx. 18%	PA3, NJ4
Propylene Glycol Monomethyl Ether Acetate (PMA)	108-65-6	Approx. 4 %	PA3, NJ4

FL = Florida Substance List

IL = Illinois Toxic Substances List

MA = Massachusetts Hazardous Substance List

NJ1 = New Jersey Hazardous Substance List

NJ2 = New Jersey Environmental Hazardous Substance List

NJ4 = New Jersey Other - included in 5 predominant ingredients > 1%

NJTSRN = New Jersey Trade Secret Registry Number

PAX = Pennsylvania Hazardous Substance List

PA1 - Pennsylvania Hazardous Substance List

PA3 = Pennsylvania Non-hazardous present at 3% or greater.

RI = Rhode Island List of Designated Substances

CN2 = Canada WHMIS Ingredient Disclosure List over 0.1%.

### CALIFORNIA PROPOSITION 65

To the best of our knowledge, this product contains no levels of listed substances, which the state of California has found to cause cancer, birth defects or other reproductive effects.

NFPA 704M RATINGS:	Health	Flammability	Reactivity	Other
	3	2	1	
	0 = Insignificant	1 = Slight	2 = Moderate	3 = High 4 = Extreme
	Health	Flammability	Reactivity	
HMIS RATINGS:	3*	2	1	
	0 = Minimal	1 = Slight	2 = Moderate	3 = Serious 4 = Severe
	* = Chronic Health Hazard			

DirectLine's's method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by DirectLine as a customer service.

THE DATA IN THIS MSDS HAS BEEN COMPILED FROM PUBLICLY AVAILABLE SOURCES. THIS DATA RELATES ONLY TO THE DESIGNATED PRODUCT AND NOT TO THE USE OF SAID PRODUCT IN COMBINATION WITH OTHER MATERIALS. BECAUSE CONDITIONS AND CIRCUMSTANCES OF USE OF THE PRODUCT ARE BEYOND OUR CONTROL AND ANY SUMMARY OF DATA SUCH AS IS REPRESENTED BY THIS MSDS IS INHERENTLY INCOMPLETE, DIRECTLINE INDUSTRIES MAKES NO WARRANTY ABOUT THE ACCURACY OF THE DATA HEREIN AND ASSUMES NO LIABILITY FOR THE USE OF SUCH DATA. RESPONSIBILITY FOR PROPER PRECAUTIONS AND SAFE USE OF THIS PRODUCT LIES WITH THE USER.