M A T E R I A L S A F E T Y D A T A S H E E T

DP 1090 **SOLVENT BASED DUCT SEALER**

========== SECTION I – MANUFACTURER IDENTIFICATION ==========

PRODUCT NAME: SOLVENT BASED DUCT SEALER
PRODUCT CODE: DP 1090

HMIS CODES: H 2 F 3 R 0 P X

MANUFACTURERS' NAME: DESIGN POLYMERICS
ADDRESS: 3301 W. Segerstrom Ave.
Santa Ana, CA 92704

EMERGENCY PHONE: Chem-Tel: (800) 255-3924 (24 Hrs)
INFORMATION PHONE: (714) 432-0600
PRODUCT CODE: DP-1090
Product type : Proprietary polymer
Product use : Construction adhesive

BUSINESS HOURS: 7:30am – 4:30pm PT
REVISION DATE: April 2, 2013
REVISION #: 1.1
Supersedes all previous

PREPARED BY: Technical Dept.

DOT Hazard Class: 3
Shipping Name: ADHESIVE containing flammable liquid

UN Number: 1133
Packing Group: III

========== SECTION II - HAZARDOUS INGREDIENTS / SARA III INFORMATION ==========

REPORTABLE COMPONENTS	CAS NUMBER	PERCENT
United States		
Methyl acetate	79-20-9	25 - 50
n-hexane	110-54-3	1 - 5
Vinyl Acetate	108-05-4	.1 - .5
Canada		
Methyl acetate	79-20-9	25 - 50
n-hexane	110-54-3	1 - 5
Vinyl Acetate	108-05-4	.1 - .5
Methanol	67-56-1	.1 - .5

Mexico

Name	CAS number	UN number	%	IDLH	Classification H	F	R	Special
methyl acetate	79-20-9	UN1993	25 - 50	3100 ppm	2	3	0	
n-hexane	110-54-3	UN1993	1 - 5	1100 ppm	1	3	0	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

========== SECTION III - HEALTH HAZARD DATA ==========

Physical state: Liquid. [Paste.]
Odor: Solvent(s) [Strong]
OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Emergency overview: DANGER!
EXTREMELY FLAMMABLE LIQUID AND VAPOR. FLAMMABLE. VAPOR MAY CAUSE FLASH FIRE. HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER.

Extremely flammable liquid. Harmful by inhalation. May be harmful if swallowed. Irritating to respiratory system and skin. Moderately irritating to eyes. Defatting to the skin. Keep away from heat, sparks and flame. Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Routes of entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Inhalation: Toxic by inhalation. Irritating to respiratory system. Inhalation causes headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.
Ingestion: Harmful if swallowed.
Skin: Irritating to skin. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis
Eyes: Moderately irritating to eyes. This product may irritate eyes upon contact.

Potential chronic health effects

Chronic effects: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Carcinogenicity: Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.
Target organs: Contains material which may cause damage to the following organs: the nervous system, peripheral nervous system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Over-exposure signs/symptoms
Inhalation: Adverse symptoms may include the following: respiratory tract irritation coughing
Ingestion: No specific data.
Skin: Adverse symptoms may include the following: irritation, redness. dryness, cracking
Eyes: Adverse symptoms may include the following: irritation, watering, redness

Medical conditions: None known.
Aggravated by overexposure

See toxicological information (Section 11)

========== SECTION IV – FIRST AID PROCEDURES ==========

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Notes to physician: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

========== SECTION V - FIRE AND EXPLOSION HAZARD DATA ==========

Flammability of the product: Extremely flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Extinguishing media Suitable: Use dry chemical, CO2, water spray (fog) or foam.

Not suitable: Do not use water jet.

Special exposure hazards: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

========== SECTION VI – ACCIDENTAL RELEASE MEASURES ==========

Personal precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Small spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Absorb with an inert material.

Large spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

========== SECTION VII - PRECAUTIONS FOR SAFE HANDLING, STORAGE, AND USE ==========

Handling: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat,sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage: Store between the following temperatures: -17 to 40°C (1.4 to 104°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

OTHER PRECAUTIONS: THIS PRODUCT IS INTENDED TO BE USED ONLY BY THE PROFESSIONAL (INDUSTRIAL) APPLICATOR UNDER PROPERLY CONTROLLED CONDITIONS. THE USE OF THIS PRODUCT IN CONFINED AREAS MAY RESULT IN DANGEROUS AIRBORNE CONCENTRATIONS. THIS MAY CAUSE THE SERIOUS HEALTH EFFECTS DESCRIBED IN SECTION III OF THE MSDS.

========== SECTION VIII – EXPOSURE CONTROLS ==========

United States

Ingredient	**Exposure limits**
Methyl acetate	**ACGIH TLV (United States, 2/2010).** TWA: 200 ppm 8 hour(s). TWA: 606 mg/m³ 8 hour(s). STEL: 250 ppm 15 minute(s). STEL: 757 mg/m³ 15 minute(s). **OSHA PEL 1989 (United States, 3/1989).** TWA: 200 ppm 8 hour(s). TWA: 610 mg/m³ 8 hour(s). STEL: 250 ppm 15 minute(s). STEL: 760 mg/m³ 15 minute(s). **NIOSH REL (United States, 6/2009).** TWA: 200 ppm 10 hour(s). TWA: 610 mg/m³ 10 hour(s). STEL: 250 ppm 15 minute(s). STEL: 760 mg/m³ 15 minute(s). **OSHA PEL (United States, 6/2010).** TWA: 200 ppm 8 hour(s). TWA: 610 mg/m³ 8 hour(s).
n-hexane	**OSHA PEL 1989 (United States, 3/1989).** TWA: 50 ppm 8 hour(s). TWA: 180 mg/m³ 8 hour(s). **NIOSH REL (United States, 6/2009).** TWA: 50 ppm 10 hour(s). TWA: 180 mg/m³ 10 hour(s). **ACGIH TLV (United States, 2/2010). Absorbed through skin.** TWA: 50 ppm 8 hour(s). **OSHA PEL (United States, 6/2010).** TWA: 500 ppm 8 hour(s). TWA: 1800 mg/m³ 8 hour(s).
Vinyl acetate	**ACGIH TLV (United States, 2/2010).** TWA: 10 ppm 8 hour(s). TWA: 35 mg/m³ 8 hour(s). STEL: 15 ppm 15 minute(s). STEL: 53 mg/m³ 15 minute(s). **OSHA PEL 1989 (United States, 3/1989).** TWA: 10 ppm 8 hour(s). TWA: 30 mg/m³ 8 hour(s). STEL: 20 ppm 15 minute(s). STEL: 60 mg/m³ 15 minute(s). **NIOSH REL (United States, 6/2009).** CEIL: 4 ppm 15 minute(s). CEIL: 15 mg/m³ 15 minute(s).

Canada

Occupational exposure limits

Ingredient	List name	TWA (8 hours) ppm	TWA (8 hours) mg/m³	TWA (8 hours) Other	STEL (15 mins) ppm	STEL (15 mins) mg/m³	STEL (15 mins) Other	Ceiling ppm	Ceiling mg/m³	Ceiling Other	Notations
Methyl acetate	US ACGIH 2/2010	200	606	-	250	757	-	-	-	-	
	AB 4/2009	200	606	-	250	757	-	-	-	-	
	BC 9/2010	200	-	-	250	-	-	-	-	-	
	ON 7/2010	200	606	-	250	757	-	-	-	-	
	QC 6/2008	200	606	-	250	757	-	-	-	-	
n-hexane	US ACGIH 2/2010	50	-	-	-	-	-	-	-	-	[1]
	AB 4/2009	50	176	-	-	-	-	-	-	-	[1]
	BC 9/2010	20	-	-	-	-	-	-	-	-	[1]
	ON 7/2010	50	-	-	-	-	-	-	-	-	[1]
	QC 6/2008	50	176	-	-	-	-	-	-	-	[1]
Methanol	US ACGIH 2/2010	200	262	-	250	328	-	-	-	-	[1]
	AB 4/2009	200	262	-	250	328	-	-	-	-	[1]
	BC 9/2010	200	-	-	250	-	-	-	-	-	[1]
	ON 7/2010	200	262	-	250	328	-	-	-	-	[1]
	QC 6/2008	200	262	-	250	328	-	-	-	-	[1]
Vinyl acetate	US ACGIH 2/2010	10	35	-	15	53	-	-	-	-	
	AB 4/2009	10	35	-	15	53	-	-	-	-	
	BC 9/2010	10	-	-	15	-	-	-	-	-	
	ON 7/2010	10	35	-	15	53	-	-	-	-	
	QC 6/2008	10	35	-	15	53	-	-	-	-	

[1]Absorbed through skin.

Mexico

Ingredient	Exposure limits
Methyl acetate	**NOM-010-STPS (Mexico, 9/2000).** LMPE-PPT: 200 ppm 8 hour(s). LMPE-PPT: 610 mg/m³ 8 hour(s). LMPE-CT: 760 mg/m³ 15 minute(s). LMPE-CT: 250 ppm 15 minute(s).
n-hexane **NOM-010-STPS (Mexico, 9/2000).**	LMPE-PPT: 50 ppm 8 hour(s). LMPE-PPT: 176 mg/m³ 8 hour(s).

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eyes: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Skin: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure Controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

========== SECTION IX - PHYSICAL / CHEMICAL CHARACTERISTICS ==========

PHYSICAL FORM: Liquid. [Paste.]
ODOR: Solvent(s) [Strong]
SOLUBILITY IN WATER: None
BOILING/CONDENSATION POINT: 54.444°C (130°F)
FREEZING POINT: Not Established
FLASH POINT: Closed cup: -18°C (-0.4°F) [Setaflash.]
EVAPORATION RATE: >1 (butyl acetate=1)

COLOR: Tan
pH: Not Applicable
RELATIVE DENSITY: 1.2638
VOC (less exempt solvents, water): 44 g/l
VOLATILITY: 34.93% (w/w)

========== SECTION X – STABILITY AND REACTIVITY DATA ==========

Chemical stability: The product is stable.

Possibility of hazardous Reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Hazardous Polymerization: Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to avoid: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Materials to avoid: Highly reactive or incompatible with the following materials:
oxidizing materials

Incompatibility: Reactive or incompatible with the following materials: metals, acids and alkalis.

Hazardous Decomposition: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Conditions of Reactivity: Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

========== SECTION XI –TOXICLOGICAL INFORMATION ==========

United States

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Methyl acetate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	>5 g/kg	-
	LDLo Subcutaneous	Rat	8 g/kg	-
n-hexane	LD50 Oral	Rat	29700 mg/kg	-
	LD50 Oral	Rat	15840 mg/kg	-
	LDLo Intraperitoneal	Rat	9100 mg/kg	-
	TDLo Oral	Rat	20000 mg/kg	-
	LC50 Inhalation Vapor	Rat	627000 mg/m3	3 minutes
	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours

Vinyl acetate	LD50 Dermal	Rabbit	2335 mg/kg	-
	LD50 Oral	Rat	2900 mg/kg	-
	LC50 Inhalation Vapor	Rat	11400 mg/m3	4 hours

Chronic toxicity

No known significant effects or critical hazards.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Methyl acetate	Eyes – Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Skin – Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate Irritant	Rabbit	-	24 hours 20 milligrams	-
n-hexane	Eyes - Mild irritant	Rabbit	-	10 milligrams	-

Conclusion/Summary

Skin Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Eyes This product may irritate eyes upon contact.

Respiratory High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.

Sensitizer No known significant effects or critical hazards.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
vinyl acetate	A3	2B	-	-	-	-

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Reproductive toxicity

No known significant effects or critical hazards.

Canada

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
methyl acetate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	>5 g/kg	-
	LDLo Subcutaneous	Rat	8 g/kg	-
n-hexane	LD50 Oral	Rat	29700 mg/kg	-
	LD50 Oral	Rat	15840 mg/kg	-
	LDLo Intraperitoneal	Rat	9100 mg/kg	-
	TDLo Oral	Rat	20000 mg/kg	-
	LC50 Inhalation Vapor	Rat	627000 mg/m3	3 minutes
	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
Methanol	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Intraperitoneal	Rat	7529 mg/kg	-
	LD50 Intravenous	Rat	2131 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
	TDLo Oral	Rat	3 g/kg	-
	TDLo	Rat	3490 mg/kg	-

	Intraperitoneal			
	TDLo Oral	Rat	3500 mg/kg	-
	TDLo	Rat	3000 mg/kg	-
	Intraperitoneal			
	TDLo Oral	Rat	8 g/kg	-
	LC50 Inhalation			
	LC50 Inhalation Gas.	Rat	145000 ppm	1 hours
	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours
	LC50 Inhalation	Rat	64000 ppm	8 hours
vinyl acetate	LD50 Dermal	Rabbit	2335 mg/kg	-
	LD50 Oral	Rat	2900 mg/kg	-
	LC 50 Inhalation Vapor	Rat	11400 mg/m3	4 hours

Chronic toxicity

No known significant effects or critical hazards.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
methyl acetate	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate Irritant	Rabbit	-	24 hours 20 milligrams	-
n-hexane	Eyes - Mild irritant	Rabbit	-	10 milligrams	-
methanol	Eyes – Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	40 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	

Conclusion/Summary

Skin: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Eyes: This product may irritate eyes upon contact.

Respiratory: High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.

Sensitizer: No known significant effects or critical hazards.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Vinyl acetate	A3	2B	-	-	-	-

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Reproductive toxicity

No known significant effects or critical hazards.

Mexico

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Methyl acetate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	>5 g/kg	-
	LDLo Subcutaneous	Rat	8 g/kg	-
n-hexane	LD50 Oral	Rat	29700 mg/kg	-
	LD50 Oral	Rat	15840 mg/kg	-
	LDLo Intraperitoneal	Rat	9100 mg/kg	-
	TDLo Oral	Rat	20000 mg/kg	-
	LC50 Inhalation Vapor	Rat	627000 mg/m3	3 minutes
	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours

Chronic toxicity

No known significant effects or critical hazards.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Methyl acetate	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate Irritant	Rabbit	-	24 hours 20 milligrams	-
n-hexane	Eyes - Mild irritant	Rabbit	-	0 milligrams	-

Conclusion/Summary

Skin: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Eyes: This product may irritate eyes upon contact.

Respiratory: High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.

Sensitizer: No known significant effects or critical hazards.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Vinyl acetate	A3	2B	-	-	-	-

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Reproductive toxicity

No known significant effects or critical hazards.

========== SECTION XII ECOLOGICAL INFORMATION ==========

Environmental effects : No known significant effects or critical hazards.

United States

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
Methyl acetate	-	Acute LC50 408000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas – juvenile (Fledgling, Hatchling, Weanling) - 26 to 34 days	96 hours

	-	Acute LC50 399000 422000 ug/L Fresh water	Fish – Fathead minnow - Pimephales promelas – 32 Days – 18.6 mm – 0.103g	96 hours
	-	Acute LC50 320000 to 348000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 28 to 32 days - 17.5 mm – 0.087 g	96 hours
n-hexane	-	Acute LC50 113000 ug/L Fresh water	Fish - Mozambique tilapia - Tilapia mossambica - 99 mm - 10 g	96 hours
	-	Acute LC50 2500 to 2980 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 31 days - 20.4 mm - 0.123 g	96 hours
Vinyl acetate	-	Acute LC50 26000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas – 4 days	96 hours
	-	Acute LC50 24000 to 30510 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 3.8 to 6.4 cm - 1 to 2 g	96 hours
	-	Acute LC50 24000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Adult	96 hours
	-	Acute LC50 23000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 4 days	96 hours
	-	Acute LC50 20000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Adult	96 hours
	-	Acute LC50 19730 to 25110 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 3.8 to 6.4 cm - 1 to 2 g	96 hours
	-	Acute LC50 18000 to 21540 ug/L Fresh water	Fish - Bluegill – Lepomis macrochirus - 3.8 to 6.4 cm - 1 to 2 g	96 hours
	-	Acute LC50 15000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas – 1 day	96 hours
	-	Acute LC50 14000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 1 days	96 hours
	-	Acute LC50 10000 to 100000 ug/L Marine water	Crustaceans – Common shrimp, sand shrimp - Crangon crangon - Larvae	48 hours

Biodegradability

No known significant effects or critical hazards.

Canada

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
Methyl acetate	-	Acute LC50 408000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 26 to 34 days	96 hours
	-	Acute LC50 399000 to 422000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 32 days - 18.6 mm - 0.103 g	96 hours
	-	Acute LC50 320000 to 348000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 28 to 32 days - 17.5 mm - 0.087 g	96 hours

n-hexane	- Acute LC50 113000 ug/L Fresh water	Fish - Mozambique tilapia - Tilapia mossambica - 99 mm - 10 g	96 hours
	- Acute LC50 2500 to 2980 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 31 days - 20.4 mm - 0.123 g	96 hours
Methanol	- Acute EC50 22200 to 23400 mg/L Fresh water	Daphnia - Water flea - Daphnia obtusa - Neonate - <24 hours	48 hours
	- Acute EC50 16.912 mg/L Marine water	Algae - Green algae – Ulva pertusa	96 hours
	- Acute EC50 20000 to 30000 ppm Fresh water	Algae - Green algae - Dunaliella tertiolecta	96 hours
	- Acute EC50 >10000000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - 6 to 24 hours	48 hours
	- Acute EC50 13000000 to 13400000 ug/L Fresh Water	Fish – Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 0.813 g	96 hours
	- Acute EC50 24500000 to 29350000 ug/L Fresh Water	Daphnia - Water flea - Daphnia magna - Larvae - <24 hours	48 hours
	- Acute EC50 12700000 to 13700000 ug/L Fresh water	Fish - Bluegill – Lepomis macrochirus - Juvenile (Fledgling, Hatchling, Weanling) - 3.07 g	96 hours
	- Acute LC50 3289 to 4395 mg/L Fresh water	Daphnia - Water flea - Daphnia magna - Neonate - <24 hours	48 hours
	- Acute LC50 >1000 mg/L Fresh water	Fish - Bluegill – Lepomis macrochirus - 6 months - 40 mm - 0.81 g	96 hours
	- Acute LC50 2500000 ug/L Marine water	Crustaceans – Common shrimp, sand shrimp - Crangon crangon - Adult	48 hours
	- Acute LC50 >100000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 0.2 to 0.5 g	96 hours
	- Acute LC50 290 mg/L Fresh water	Fish - Zebra danio – Danio rerio - Egg	96 hours
	- Acute LC50 10000000 to 33000000 ug/L Marine water	Fish - Hooknose – Agonus cataphractus - Adult	96 hours
	- Chronic NOEC 71 ppm Fresh water	Algae - Algae - Heterosigma akashiwo	96 hours
	- Chronic NOEC 9.96 mg/L Marine water	Algae - Green algae - Ulva pertusa	96 hours
	- Chronic NOEC 10000 ppm Fresh water	Algae - Green algae - Dunaliella tertiolecta	96 hours
Vinyl acetate	- Acute LC50 26000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 4 days	96 hours
	- Acute LC50 24000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Adult	96 hours

- Acute LC50 24000 to 30510 ug/L Fresh water to 6.4 cm - 1 to 2 g	Fish - Fathead minnow - Pimephales promelas - 3.8	96 hours
- Acute LC50 23000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 4 days	96 hours
- Acute LC50 20000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Adult	96 hours
- Acute LC50 19730 to 25110 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 3.8 to 6.4 cm - 1 to 2 g	96 hours
- Acute LC50 18000 to 21540 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 3.8 to 6.4 cm - 1 to 2 g	96 hours
- Acute LC50 15000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 1 days	96 hours
- Acute LC50 14000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 1 days	96 hours
- Acute LC50 10000 to 100000 ug/L Marine water	Crustaceans - Common shrimp, sand shrimp – Crangon crangon - Larvae 48 hours	

Biodegradability
No known significant effects or critical hazards.

Mexico

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
Methyl acetate	-	Acute LC50 408000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 26 to 34 days	96 hours
	-	Acute LC50 399000 to 422000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 32 days – 18.6 mm - 0.103 g	96 hours
	-	Acute LC50 320000 to 348000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas – 28 to 32 days – 17.5 mm 0.087 g	96 hours
n-hexane	-	Acute LC50 113000 ug/L Fresh water	Tilapia mossambica - 99 mm - 10 g	96 hours
	-	Acute LC50 2500 to 2980 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 31 days - 20.4 mm - 0.123 g	96 hours

Biodegradability
No known significant effects or critical hazards.
Other adverse effects: No known significant effects or critical hazards.

========== SECTION XIII DISPOSAL CONSIDERATION ==========

Waste disposal
The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been

cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Disposal should be in accordance with applicable regional, national and local laws and regulations.
Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

========== SECTION XIV Transportation Information ==========

Regulatory information	UN Number	Proper shipping Name	Classes	PG*	Label	Additional Information
DOT Classification	1133	ADHESIVES, containing flammable liquid	3	III		**Remarks** Limited quantity
TDG Classification	1133	ADHESIVES, containing flammable liquid	3	III		**Remarks** Limited quantity
Mexico Classification	1133	ADHESIVES, containing flammable liquid	3	III		**Remarks** Limited quantity
ADR/RID Class	1133	ADHESIVES, containing flammable liquid	3	III		**Remarks** Limited quantity
IMDG Class	1133	ADHESIVES, containing flammable liquid	3	III		**Remarks** Limited quantity
IATA-DGR Class	1133	ADHESIVES, containing flammable liquid	3	III		-

PG* : Packing group

========== SECTION XV Regulatory Information ==========

New Jersey Hazardous Substances: The following components are listed: METHYL ACETATE; ACETIC ACID, METHYL ESTER; VINYL ACETATE; ACETIC ACID ETHENYL ESTER; n-HEXANE; HEXANE
New Jersey Spill: None of the components are listed.
New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.
Pennsylvania RTK Hazardous Substances: The following components are listed: ACETIC ACID, METHYL ESTER; ACETIC ACID ETHENYL ESTER; HEXANE

Canada

WHMIS (Canada)
Class B-2: Flammable liquid
Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists
CEPA Toxic substances: None of the components are listed.
Canadian ARET: None of the components are listed.
Canadian NPRI: The following components are listed: n-Hexane
Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.

Canada inventory: Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Mexico

Classification

International regulations

International lists

Australia inventory (AICS): Not determined.
China inventory (IECSC): Not determined.
Japan inventory: Not determined.
Korea inventory: Not determined.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.

Chemical Weapons Convention List Schedule I Chemicals : Not listed

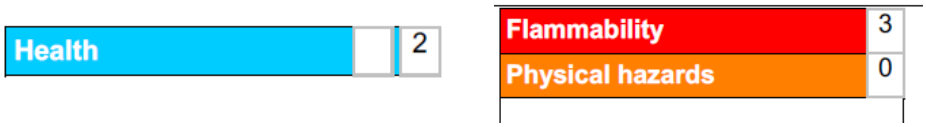
Chemical Weapons Convention List Schedule II Chemicals : Not listed

Chemical Weapons Convention List Schedule III Chemicals : Not listed

========== SECTION XVI Other Information ==========

Label requirements : EXTREMELY FLAMMABLE LIQUID AND VAPOR. FLAMMABLE. VAPOR MAY CAUSE FLASH FIRE. HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CANCER.

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868. The customer is responsible for determining the PPE code for this material. Indicates information that has changed from previously issued version.

Date of printing	**2/2/2012**
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Version	1

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