RC LACQUER SOLVENT

MSDS ID: RC0040 Revised: 09-15-2008 Replaces: 11-13-2006

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:

RC LACQUER SOLVENT

MSDS ID:

RC0040

Synonyms:

RC Lacquer Thinner

CAS Number:

Mixture

Chemical Family:

Oxygenated, Aliphatic, & Aromatic Solvents

Formula:

Hydrocarbon Mixture

DISTRIBUTED BY: Hydrite Chemical Co. 300 N. Patrick Blvd. Brookfield, WI 53008-0948 **EMERGENCY RESPONSE NUMBERS:** 24 Hour Emergency #: (414) 277-1311 CHEMTREC Emergency #: (800) 424-9300

(262) 792-1450

MANUFACTURED BY: HYDRITE CHEMICAL CO.

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: WARNING! FLAMMABLE LIQUID AND VAPOR. Keep away from heat, sparks, and open flame. Causes eye and skin irritation. May cause respiratory irritation. Harmful or fatal if swallowed. May cause blindness. Harmful if inhaled. Harmful if absorbed through skin. May cause central nervous system depression. Aspiration may cause lung damage. Breathing high concentrations can cause irregular heartbeats which may be fatal. Breathing of aerosol may cause lung damage.

Physical State: Liquid.

Color:

Clear. Colorless to faint yellow.

Odor:

Solvent.

POTENTIAL HEALTH EFFECTS

Routes Of Exposure: Eves. Ingestion. Inhalation. Skin. Absorption.

Target Organs: Central Nervous System. Eyes. Kidneys. Liver. Respiratory System. Skin. Mucous Membranes. Auditory System, Heart, Gastrointestinal Tract. Blood. Lungs. Spleen. Cardiovascular System. Testes.

Eye Contact: Causes severe irritation. Liquid contact may cause: redness. stinging. swelling. tearing. burning. blurred vision, corneal injury, permanent eye damage. Prolonged or repeated contact may cause more serious effects. Vapor or mist may cause: irritation.

Skin Contact: May cause moderate irritation. Contact may cause: redness. burning, itching, swelling, drying. cracking, dermatitis (inflammation of the skin), sensitization, cyanosis of the extremities. Prolonged and repeated contact with skin can cause defatting and drying of the skin which may result in skin irritation and dermatitis. Prolonged or repeated contact may cause more serious effects.

Skin Absorption: Toxic. Harmful if absorbed through skin. May be absorbed through the skin and cause effects similar to inhalation or ingestion. Skin absorption of material may produce systemic toxicity. Skin absorption may contribute to overall exposure.

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Inhalation: Causes moderate irritation. Harmful if inhaled. Vapors or mists may irritate: nose. throat. respiratory tract. May cause: nasal discomfort and discharge. hoarseness. coughing. excess formation of phlegm. chest pain. difficulty breathing. dizziness. headache. irregular heart beat. numbness in the extremities. central nervous system depression. nausea. fatigue. delirium. drowsiness. convulsions. anesthesia. paralysis. unconsciousness. stupor. incoordination. weakness. vomiting. lightheadedness. coma. burning sensation. sleepiness. slurring of speech. suffocation. death. Irritation may lead to chemical pneumonitis and pulmonary edema. May cause effects similar to those described for swallowing. Aspiration may lead to pulmonary edema. Breathing air which contains butyl acetate, resulting from its use in aerosol applications, may cause delayed lung damage. High vapor concentrations may cause: kidney and liver damage. blindness.

Ingestion: May cause moderate irritation. Toxic by ingestion. Harmful or fatal if swallowed. May cause: gastrointestinal irritation. nausea. vomiting. diarrhea. central nervous system depression. collapse. unconsciousness. coma. blindness. death. May cause effects similar to inhalation. Liquid ingestion may result in vomiting; aspiration (breathing of liquid into the lungs) must be avoided as liquid contact with the lungs can result in chemical pneumonitis and pulmonary edema/hemorrhage. Aspiration can result in severe lung damage or death. May cause damage to the: kidneys. liver.

Medical Conditions Aggravated By Exposure To Product: Eye disorders. Kidney disorders. Liver disorders. Respiratory system disorders. Skin disorders. Central nervous system disorders. Heart disorders. Auditory System Disorders. Lung disorders. Nervous system disorders. Persons also exposed to acetic acid or propanol might be more sensitive, as these are metabolites of propyl acetate. Dermatitis. Impaired pulmonary function.

Other: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage (sometimes referred to as Solvent or Painters' Syndrome). Intentional misuse by deliberately concentrating and inhaling this material may be harmful or fatal. Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction. This material (or a component) may cause harm to the human fetus based on tests with laboratory animals. Prolonged or repeated overexposure to toluene, a component of this product, has been associated with reproductive effects in experimental animals and in long-term chemical abuse situations. Long-term overexposure to toluene has been associated with impaired color vision. Long-term overexposures to toluene in occupational environments have been associated with hearing damage. There is no evidence that exposure to Methyl Ethyl Ketone (MEK) alone causes progressive or irreversible neurotoxic effects. However, simultaneous over-exposure to MEK and n-Hexane can potentiate the known irreversible neurotoxic effects of n-Hexane. There is no reported human evidence that these neurotoxic effects occur when exposure to both chemicals is maintained below established OSHA and ACGIH limits. Drinking alcohol may worsen the effects resulting from exposure to this product. Health studies have shown that many petroleum hydrocarbons and synthetic lubricants pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized. Prolonged exposure to high concentrations can cause central neurological depression and EEG abnormalities. Acetone may increase the toxicity to the liver and kidney of chemicals such as ethanol, 1,2-dichloroethylene, and chloroform. Humans with liver or kidney disease may be at increased risk due to this potentiation effect. Chronic: May cause liver and kidney damage. Altered mental state, drowsiness, peripheral motor neuropathy, irreversible brain damage (so-called Petrol Sniffers Encephalopathy), delerium, seizures, and sudden death have been reported from repeated over-exposure such as gasoline and naphtha abusers. Chronic exposure may produce anemia, bronchitis, leucocitosis, edema, blurry cornea, liver, kidney, and heart damages, blood alterations, and greasy degeneration of the viscera. Chronic overexposure to methyl alcohol may cause liver and kidney injury and permanent central nervous system injury. Chronic Exposure: Examples of chronic effects include physical dependence, malnutrition, neurological effects (e.g. amnesia, dementia, prolonged sleepiness). Combined exposure to ethanol and certain other chemicals may result in increased toxic effects. Repeated overexposure may cause liver damage. Avoid simultaneous exposure to Isopropyl Alcohol and haloalkanes, such as Chloroform, Trichloroethane and Carbon Tetrachloride. Coexposure greatly increases the liver and kidney toxic effects of these haloalkanes, leading to hepatitis and kidney failure. Liver damage may be evidenced by loss of appetite, jaundice and pain in the upper abdomen on

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the right side. There is evidence that long-term repeated exposure to vapor concentrations greater than 50 ppm may result in some loss of hearing. Butanol vapor can cause specific injury to the cornea. Butanol liquid is toxic if aspirated. May affect sense of balance with chronic exposure.

Cancer Information: IARC has classified Ethylbenzene as a Group 2B - Possibly Carcinogenic to Humans. The American Conference of Governmental Industrial Hygienists (ACGIH) lists Ethylbenzene as an A3 - Confirmed animal carcinogen with unkown relevance to humans. NTP has identified Trichloroethylene as a substance reasonably anticipated to be a human carcinogen (Group 2). IARC has classified Trichloroethylene as probably carcinogenic to humans (Group 2A). ACGIH lists Trichloroethylene as an A2 - Suspected Human Carcinogen. NTP has identified Methylene Chloride as a substance reasonably anticipated to be a human carcinogen (Group 2). IARC has classified Methylene chloride as possibly carcinogenic to humans (Group 2B). ACGIH lists Methylene Chloride as an A3-Confirmed Animal Carcinogen with Unknown Relevance to Humans. OSHA considers Methylene Chloride as a suspected human carcinogen. NTP has identified Perchloroethylene as a substance reasonably anticipated to be a human carcinogen (Group 2). IARC has classified Perchloroethylene as probably carcinogenic to humans (Group 2A). ACGIH lists Perchloroethylene as an A3-Confirmed Animal Carcinogen with Unknown Relevance to Humans.

Potential Environmental Effects: See Section 12.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	OSHA Hazard	<u>% by Wt.</u>
Toluene	108-88-3	YES	17 - 60 %
Methyl Ethyl Ketone	78-93-3	YES	5 - 40 %
Xylene (Mixed Isomers)	1330-20-7	YES	0 - 30 %
Methyl Isobutyl Ketone	108-10-1	YES	0 - 30 %
Acetone	67-64-1	YES	0 - 16 %
N-Propyl Acetate	109-60-4	YES	0 - 15 %
Ethylbenzene	100-41-4	YES	0 - 14 %
N-Butyl Acetate	123-86-4	YES	0 - 13 %
Solvent Naphtha (Petroleum), Light Aromatic	64742-95-6	YES	0 - 10 %
Ethyl Acetate	141-78-6	YES	0 - 10 %
Methanol	67-56-1	YES	0 - 6 %
N-Propyl Alcohol	71-23-8	YES	0 - 6 %
Ethyl Alcohol	64-17-5	YES	0 - 6 %
Naphtha (Petroleum), Hydrotreated Light/Aliphatic	VARIES	YES	0 - 5 %
Hydrocarbons			
Isopropyl Acetate	108-21-4	YES	0 - 5 %
Trimethylbenzenes, all isomers	25551-13-7	YES	0 - 5 %
Isopropyl Alcohol	67-63-0	YES	0 - 5 %
Others	MIXTURE	*	0 - 5 %
1-Butanol	71-36-3	YES	0 - 5 %
Ethylmethylbenzene, all isomers	25550-14-5	YES	0 - 5 %
Propylene Glycol Monomethyl Ether Acetate	108-65-6	YES	0 - 4 %
1,2,4-Trimethylbenzene	95-63-6	YES	0 - 4 %
Isobutyl Acetate	110-19-0	YES	0 - 4 %
Nonane, all isomers	MIXTURE	YES	0 - 3 %
Methyl Amyl Ketone	110-43-0	YES	0 - 3 %
Distillates, Petroleum, Hydrotreated Light	64742-47-8	YES	0 - 3 %
Tert-Butyl Acetate	540-88-5	YES	0 - 2 %
2-Butoxyethanol	111-76-2	YES	0 - 2 %

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Note: * No data available.

4. FIRST-AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention.

Skin Contact: Immediately flush skin with plenty of water while removing contaminated clothing and shoes. Do not reuse clothing or shoes until cleaned. If irritation develops or persists, get medical attention. If skin surface is not damaged, wash thoroughly with soap and water. Do not apply oils or ointments unless ordered by the physician. Discard contaminated leather articles such as shoes and belt. Discard items which cannot be decontaminated. Injection injuries may not appear serious at first but within a few hours, without proper treatment, the area will become swollen, discolored and extremely painful.

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY. Keep at rest.

Ingestion: If fully conscious, give two glasses of water, then induce vomiting by touching back of throat with finger. Keep head below hips to prevent aspiration of liquid into the lungs. CALL A PHYSICIAN immediately. Never induce vomiting or give anything by mouth to an unconscious victim. If victim is drowsy or unconscious, place on side with head down. Do not leave victim unattended.

Note to Physicians: Exposure to high concentrations of this material (e.g., in enclosed spaces or with deliberate abuse) may be associated with cardiac arrhythmias. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. Other drugs with less arrhythmogenic potential should be considered. If sympathomimetic drugs are administered, observe for the development of cardiac arrhythmias. Following injection, prompt debridement of the wound is necessary to minimize necrosis and tissue loss. Individuals experiencing breathing difficulties after exposure to vapor generated in aerosol applications should be observed for at least 48 hours in case delayed respiratory complications develop.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Water spray. Dry chemical. Carbon dioxide. Alcohol foam. Water may be ineffective but should be used to cool fire-exposed structures and vessels. DO NOT USE: Direct water stream.

Fire Fighting Methods: Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers and disperse vapors. If a leak or spill has not ignited, use water spray to disperse the vapors. If container is not properly cooled, it can rupture in the heat of a fire. Avoid water accumulation. Product may reignite and burn on the water's surface. Do not use direct water stream. May spread fire. Avoid spraying water directly into storage containers due to danger of boil over. This liquid is volatile and gives off invisible vapors. Run-off from fire control may cause pollution.

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Fire And Explosion Hazards: FLAMMABLE LIQUID. Vapors are heavier than air. Vapors may settle in low or confined areas, or travel long distances along the ground or surface to an ignition source where they may ignite, flashback, or explode. Keep away from heat, sparks, flames or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment). PROCESS HAZARD: Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into hot equipment under a vacuum, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated-temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture. Container areas exposed to direct flame should be cooled with large quantities of water as needed to prevent weakening of container structure. May polymerize explosively when involved in a fire or exposed to heat. This material releases vapors at or below ambient temperatures. Forms explosive peroxides which may be shock sensitive. Vapors may form explosive mixture with air. Material will readily ignite at room temperature.

Hazardous Combustion Products: Carbon dioxide. Carbon monoxide. Smoke. Fumes. Aldehydes. Unidentifiable organic materials. Unidentified toxic and/or irritating compounds. Unburned hydrocarbons.

6. ACCIDENTAL RELEASE MEASURES

Spill Clean-Up Procedures: FLAMMABLE LIQUID. Eliminate all sources of ignition. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit. Shut off source of leak if safe to do so. Contain spill, place into drums for proper disposal. Soak up residue with non-flammable absorbent material. DO NOT use sawdust or other cellulose-type material. Place in non-leaking containers for immediate disposal. Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs. Prevent entry into basements, low areas, or confined areas. Do not touch or walk through spilled material. If fire potential exists, blanket spill with alcohol-type aqueous film-forming foam or use water spray to disperse vapors. Use non-sparking tools and equipment.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. Empty containers retain product residue (vapor, dust, or liquid) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other source of ignition. They may explode and cause injury or death. Launder contaminated clothing before reuse. Air-dry contaminated clothing in a well ventilated area before laundering. Never use pressure to empty drums. Always open containers slowly to allow any excess pressure to vent. Use non-sparking tools and equipment. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Use appropriate grounding and bonding practices.

Storage: FLAMMABLE LIQUID. Store in a cool, well ventilated area away from all sources of ignition and out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer containers and equipment. Store away from light. Minimize exposure to air. After opening, purge container with nitrogen before reclosing. Periodically test for peroxide formation on long-term storage. If peroxide formation is suspected, do not open or move container. Addition of water or appropriate reducing materials will lessen peroxide formation.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:				
Component	OSHA PEL	OSHA STEL/C	ACGIH TWA	ACGIH STEL/C
Toluene	200 ppm	300 ppm-C	20 ppm	Not Estab.
	100 ppm+	150 ppm+	• •	
Methyl Ethyl Ketone	200 ppm	Not Estab.	200 ppm	300 ppm
,	200 ppm+	300 ppm+	• •	• •
Xylene (Mixed Isomers)	100 ppm	Not Estab.	100 ppm	150 ppm
	100 ppm+	150 ppm+	• •	, ,
Methyl Isobutyl Ketone	100 ppm	Not Estab.	50 ppm	75 ppm
,,,	50 ppm+	75 ppm+		
Acetone	1000 ppm	Not Estab.	500 ppm	750 ppm
	750 ppm+	1000 ppm+	• •	• •
N-Propyl Acetate	200 ppm	Not Estab.	200 ppm	250 ppm
	200 ppm+	250 ppm+	• •	• •
Ethylbenzene	100 ppm	Not Estab.	100 ppm	125 ppm
	100 ppm+	125 ppm+	. ,	• •
N-Butyl Acetate	150 ppm	Not Estab.	150 ppm	200 ppm
	150 ppm+	200 ppm+		• •
Solvent Naphtha (Petroleum), Light	*Not Estab.	Not Estab.	Not Estab.	Not Estab.
Aromatic				
Ethyl Acetate	400 ppm	Not Estab.	400 ppm	Not Estab.
Methanol	200 ppm	Not Estab.	200 ppm-S	250 ppm-S
	200 ppm-S+	250 ppm-S+	, ,	
N-Propyl Alcohol	200 ppm	Not Estab.	100 ppm	Not Estab.
, , , , , , , , , , , , , , , , , , ,	200 ppm+	250 ppm+		
Ethyl Alcohol	1000 ppm	Not Estab.	1000 ppm	Not Estab.
Naphtha (Petroleum), Hydrotreated	Not Estab.	Not Estab.	Not Estab.	Not Estab.
Light/Aliphatic Hydrocarbons				
Isopropyl Acetate	250 ppm	Not Estab.	100 ppm	200 ppm
1 13	250 ppm+	310 ppm+		
Trimethylbenzenes, all isomers	Not Estab.	Not Estab.	*25 ppm	Not Estab.
Isopropyl Alcohol	400 ppm	Not Estab.	200 ppm	400 ppm
,	400 ppm+	500 ppm+		
Others	Not Estab.	Not Estab.	Not Estab.	Not Estab.
1-Butanol	100 ppm.	Not Estab.	20 ppm	Not Estab.
	Not Estab+	C 50 ppm-S+		
Ethylmethylbenzene, all isomers	Not Estab.	Not Estab.	Not Estab.	Not Estab.
Propylene Glycol Monomethyl Ether	Not Estab.	Not Estab.	Not Estab.	Not Estab.
Acetate				
1,2,4-Trimethylbenzene	25 ppm+	Not Estab.	*25 ppm	Not Estab.
Isobutyl Acetate	150 ppm	Not Estab.	150 ppm	Not Estab.
Nonane, all isomers	**Not Estab.	**Not Estab.	200 ppm	Not Estab.
	**200 ppm+	**Not Estab.+		
Methyl Amyl Ketone	100 ppm	Not Estab.	50 ppm	Not Estab.
Distillates, Petroleum, Hydrotreated Light	Not Estab.	Not Estab.	Not Estab.	Not Estab.
Tert-Butyl Acetate	200 ppm	Not Estab.	200 ppm	Not Estab.
2-Butoxyethanol	S 50 ppm	Not Estab.	20 ppm	Not Estab.
	S 25 ppm+	Not Estab+		

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11641364. 03-13-2000				
Replaces: 11-13-2006				
1-Methoxy-2-Propanol	100 ppm+	150 ppm+	100 ppm	150 ppm
1,1,1-Trichloroethane	350 ppm	Not Estab.	350 ppm	450 ppm
	350 ppm+	450 ppm+		
Trichloroethylene	100 ppm	*200 ppm-C	10 ppm	25 ppm
•	50 ppm+	200 ppm+		
Methylene Chloride	*25 ppm	*125 ppm	50 ppm	Not Estab.
Perchloroethylene	*100 ppm	200 ppm-C	25 ppm	100 ppm
•	25 ppm+	Not Estab.		

Note: + Vacated 1989 OSHA PEL(s). C = Denotes Ceiling Limit. S = Skin notation. * Exposure limit for Trimethyl benzene mixed isomers. * AIHA Workplace Environmental Exposure Level (WEEL) for Propylene Glycol Monomethyl Ether Acetate: 50 ppm TWA. ** Exposure limit for Nonane. * Exposure limit for Stoddard Solvent. * OSHA - PEL Table Z-2: Acceptable maximum peak above the acceptable ceiling concentration for an 8-hour shift: 300 ppm for 5 minutes in any 2 hours. * Methylene Chloride is subject to the requirements under OSHA 29 CFR 1910.1052. Exposure limits are set as follows: 25 ppm-TWA; 125 ppm-STEL; 12.5 ppm (8-hour TWA) action level. * OSHA - PEL Table Z-2: Acceptable maximum peak above the acceptable ceiling concentration for an 8-hour shift: 300 ppm for 5 minutes in any 3 hours.

Engineering Controls: Local exhaust ventilation, process enclosures, or other engineering controls are imperative when handling or using this product to avoid overexposure. Avoid creating dust or mist. Use explosion-proof ventilation equipment. Maintain adequate ventilation. Do not use in closed or confined spaces. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

Eye/Face Protection: Wear chemical safety goggles while handling this product. Wear additional eye protection such as a face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Do not wear contact lenses. Wear a full-face respirator, if needed.

Skin Protection: Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Chemical-resistant. Impervious.

Respiratory Protection: Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH-Approved organic respirator. NIOSH-Approved positive pressure supplied air respirator. NIOSH-Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

Other Protective Equipment: Eye-wash station. Safety shower. Rubber apron. Chemical safety shoes. Rubber boots. Protective clothing. Full chemical suit.

General Hygiene Conditions: Wash with soap and water before meal times and at the end of each work shift. Food, beverages, and tobacco products should not be carried, stored or consumed where this material is in use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.

Color: Clear. Colorless to faint yellow.

Odor: Solvent.

Boiling Point (deg. F): >100 Freezing Point (deg. F): N.D.

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Melting Point (deg. F): N.D. Vapor Pressure (mm Hg): N.D. Vapor Density (air=1): >1

Solubility in Water: Moderate-Appreciable

pH: N.A.

Specific Gravity: ~0.842-0.850

% Volatile (wt%): 100

Evaporation Rate (nBuAc = 1): N.D.

VOC (wt%): ~87.8-99.2 VOC (lbs/gal): ~6.15-7.02

Viscosity: N.D.

Flash Point: < 40 Deg. F. Flash Point Method: TCC. Lower Explosion Limit: ~0.9 Upper Explosion Limit: ~14

Autoignition Temperature: No Data

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Conditions To Avoid: Avoid contact with heat, sparks, electric arcs, other hot surfaces, and open flames. Avoid static discharges. Avoid other ignition sources. Keep away from strong oxidizing conditions and agents. Forms explosive peroxides which may be shock sensitive. Avoid contact with air. Do not distill to near dryness. Do not allow to evaporate to near dryness.

Incompatible Materials: Acids. Alkalies. Halogens or halogen compounds. Hydrogen peroxide. Oxygen. Amines. Alkanolamines. Aldehydes. Ammonia. Chlorinated compounds. Chloroform. Peroxides. Oleum. Isocyanates. Pyridines. Potassium tert-butoxide. Inorganic acids. Chromium trioxide. Copper or copper alloys. Caustics. Chlorosulfonic acid. Isopropyl alcohol (during storage). Can attack many plastics, resins and rubber. Molten sulfur. Chloroform in the presence of bases. May attack some forms of plastics, rubbers, and coatings. Oxidizing agents. Alkali metal hydroxides. Nitric acid. Sodium hydroxide. Polymerization initiators. Perchloric acid. Silica gel. Alumina. Perchloric Acid. Nitrates. Sulfuric acid. Liquid chlorine. Strong bases. Nitric Acid. Lithium tetrahydroaluminate. Oxygen under pressure. Perchlorates. Coatings. Alkali metals. Aluminum. Lead. Strong inorganic acids. Chlorine. Ethylene oxide. Acetaldehyde. Ketones. Acid anhydrides. Permanganates. Iron salts. Carbony dichloride (phosgene). Trinitromethane. Barium perchlorate. Dioxygenyl tetrafluoroborate. Nitroform. Hypochlorous acid. Urea formaldehyde. Hexamethylene diisocyanate. Halogenated organics. Aluminum isoproproxide + crotonaldehyde + heat. Sodium dichromate + sulfuric acid. Hydrogen + palladium. Hydrogen peroxide-sulfuric acid combination. Strong mineral acids.

Hazardous Decomposition Products: Carbon dioxide. Carbon monoxide. Unidentifiable organic materials. Unidentified toxic and/or irritating compounds. Acetic acid. Smoke. Fumes. Unburned hydrocarbons. Hydrocarbons. Aldehydes. Ketones. Organic acids.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur under normal conditions.

11. TOXICOLOGICAL INFORMATION

LD50 Oral:

No Data

LD50 Skin:

No Data

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12. ECOLOGICAL INFORMATION

Ecotoxicological Information: No data available.

Chemical Fate Information: No data available.

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: F005, F003 & D001

Note: An additional EPA Hazardous Waste Number may include: D018. Additional EPA Hazardous Waste

Numbers may apply. Refer to current Code of Federal Regulations.

Disposal Method: Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. Reclaim (recycle) solvent. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Since emptied containers retain product residue, follow label warnings even after container is emptied. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition.

14. TRANSPORTATION INFORMATION

DOT (Department of Transportation):

Proper Shipping Name:

PAINT RELATED MATERIAL

Hazard Class:

Identification Number:

UN1263

Packing Group:

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3

Label Required:

FLAMMABLE

Reportable Quantity (RQ):

1000# (Toluene); 5000# (Methyl Ethyl Ketone); 100# (Xylene-mixed isomers); 5000# (Methyl Isobutyl Ketone); 5000# (Acetone); 1000# (Ethyl Benzene); 5000# (Butyl Acetate); 5000# (Ethyl Acetate); 5000# (Methanol); 5000# (n-Butyl Alcohol); 5000# (Isobutyl Acetate); 5000# (tert-Butyl Acetate).; 100# (Trichloroethylene);

1000# (Methylene Chloride); 100# (Perchloroethylene)

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA Inventory Status: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

SARA Title III Section 311/312 Category: Immediate (Acute) Health Hazard: Yes Delayed (Chronic) Health Hazard: Yes

Fire Hazard: Yes

Sudden Release Of Pressure Hazard: No

Reactive Hazard: No

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SARA Section 302/304/313/HAP:

JANA Section 302/304/313/11Ar.					
Component	CERCLA RQ	SARA RQ	SARA TPQ	SARA 313	U.S. HAP
Toluene	1000	N.A.	N.A.	YES	YES
Methyl Ethyl Ketone	5000	N.A.	N.A.	NO	NO
Xylene (Mixed Isomers)	100	N.A.	N.A.	YES	YES
Methyl Isobutyl Ketone	5000	N.A.	N.A.	YES	YES
Acetone	5000	N.A.	N.A.	NO	NO
N-Propyl Acetate	N.A.	N.A.	N.A.	NO	NO
Ethylbenzene	1000	N.A.	N.A.	YES	YES
N-Butyl Acetate	5000	N.A.	N.A.	NO	NO
Solvent Naphtha (Petroleum), Light	N.A.	N.A.	N.A.	NO	NO
Aromatic					
Ethyl Acetate	5000	N.A.	N.A.	NO	NO
Methanol	5000	N.A.	N.A.	YES	YES
N-Propyl Alcohol	N.A.	N.A.	N.A.	NO	NO
Ethyl Alcohol	N.A.	N.A.	N.A.	NO	NO
Naphtha (Petroleum), Hydrotreated	N.A.	N.A.	N.A.	NO	NO
Light/Aliphatic Hydrocarbons					
Isopropyl Acetate	N.A.	N.A.	N.A.	NO	NO
Trimethylbenzenes, all isomers	N.A.	N.A.	N.A.	NO	NO
Isopropyl Alcohol	N.A.	N.A.	N.A.	NO	NO
Others	*	*	*	*	*
1-Butanol	5000	N.A.	N.A.	YES	NO
Ethylmethylbenzene, all isomers	N.A.	N.A.	N.A.	NO	NO
Propylene Glycol Monomethyl Ether	N.A.	N.A.	N.A.	NO	NO
Acetate					
1,2,4-Trimethylbenzene	N.A.	N.A.	N.A.	YES	NO
Isobutyl Acetate	5000	N.A.	N.A.	NO	NO
Nonane, all isomers	N.A.	N.A.	N.A.	NO	NO
Methyl Amyl Ketone	N.A.	N.A.	N.A.	NO	NO
Distillates, Petroleum, Hydrotreated Light	N.A.	N.A.	N.A.	NO	NO
Tert-Butyl Acetate	5000	N.A.	N.A.	NO	NO
2-Butoxyethanol	N.A.	N.A.	N.A.	YES	NO
1-Methoxy-2-Propanol	N.A.	N.A.	N.A.	NO	NO
1,1,1-Trichloroethane	1000	N.A.	N.A.	YES	YES
Trichloroethylene	100	N.A.	N.A.	YES	YES
Methylene Chloride	1000	N.A.	N.A.	YES	YES
Perchloroethylene	100	N.A.	N.A.	YES	YES
•					

Note: * No data available.

Clean Water Act: This product contains material which is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharge or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800)424-8802.

U.S. STATE REGULATIONS

California - The following components are listed under Proposition 65:

Toluene (17-60%) Ethylbenzene (0-14%) Naphthalene (<0.1%)

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Methylene chloride (0-0.1%) Perchloroethylene (0-0.1%) Trichloroethylene (0-0.1%)

Benzene (trace)

This product may contain other chemicals subject to California's Proposition 65.

Wisconsin - The following components are listed as a Wisconsin HAP:

Toluene. Xylene, mixed isomers (Xylol). Methyl isobutyl ketone. Ethyl Benzene. Trimethyl benzene, mixed isomers. n-Butyl Alcohol. Methyl n-Amyl Ketone. 2-Butoxyethanol. Propylene glycol monomethyl ether (PGME). Trichloroethylene. Methylene Chloride. Perchloroethylene.

16. ADDITIONAL INFORMATION

Hydrite Rating System

Health:

3*

Flammability:

3

Reactivity:

* = Chronic Health Hazard

NFPA Rating System

Health:

Flammability:

3

Reactivity:

Special Hazard: None

MSDS Abbreviations

N.A. = Not Applicable

N.D. = Not Determined

HAP = Hazardous Air Pollutant

VOC = Volatile Organic Compound

C = Ceiling Limit

N.E./Not Estab. = Not Established

MSDS Prepared by: NAO

Reason for Revision: Changes made throughout the MSDS.

The data in this Material Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which HYDRITE CHEMICAL CO. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.

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