SAFETY DATA SHEET

RC LACQUER SOLVENT
Product ID: RC004001
Revised: 12-01-2014
Replaces: 08-22-2012

1. IDENTIFICATION

Product Name: RC LACQUER SOLVENT
Synonyms: RC Lacquer Thinner
CAS Number: Mixture
Recommended Use: No data available.
Restrictions on Use: No data available.

Hydrite Chemical Co.
300 N. Patrick Blvd.
Brookfield, WI 53008-0948
(262) 792-1450

EMERGENCY RESPONSE NUMBERS:
24 Hour Emergency #: (414) 277-1311
CHEMTREC Emergency #: (800) 424-9300

2. HAZARD(S) IDENTIFICATION

Signal Word: Danger

GHS Classification:
Reproductive Toxicity Category 1B
Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 1
Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 1
Aspiration Hazard Category 1
Flammable Liquid Category 2
Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2
Carcinogenicity Category 2
Acute Toxicity - Inhalation Vapour Category 4
Acute Toxicity - Dermal Category 4
Acute Toxicity - Oral Category 4

Hazard Statements:
Highly flammable liquid and vapour.
Harmful if swallowed, in contact with skin or if inhaled.
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye irritation.
Suspected of causing cancer.
May damage fertility or the unborn child (fetotoxic and teratogenic effects).
Causes damage to organs (eye, central nervous system).
Causes damage to organs (eye, central nervous system) through prolonged or repeated exposure.

Precautionary Statements:

Prevention:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, sparks, open flames and hot surfaces. – No smoking.
Keep container tightly closed.

	Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
Response:	IF SWALLOWED: Immediately call a POISON CENTER or doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed: Call a POISON CENTER or doctor/physician. Specific treatment (see First Aid on SDS or on this label). Rinse mouth. Do NOT induce vomiting. If skin irritation occurs: Get medical advice or attention. If eye irritation persists: Get medical advice or attention. Take off contaminated clothing and wash before reuse. In case of fire: Use Carbon dioxide., Dry chemical., Foam., Water spray., Water fog. to extinguish.
Storage:	Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store in a secure manner.
Disposal:	Dispose of in accordance with local, regional and international regulations.
Hazards Not Otherwise Classified:	Breathing high concentrations can cause irregular heartbeats which may be fatal.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	% by Wt.
Toluene	108-88-3	10 - 40 %
Methyl Isobutyl Ketone	108-10-1	5 - 40 %
Acetone	67-64-1	1 - 30 %
Xylene (Mixed Isomers)	1330-20-7	5 - 30 %
Methyl Ethyl Ketone	78-93-3	1 - 25 %
Ethylbenzene	100-41-4	1 - 15 %
Methanol	67-56-1	2 - 7 %
Isopropyl Alcohol	67-63-0	< 15 %
2-Butoxyethanol	111-76-2	< 10 %
N-Butyl Acetate	123-86-4	2 - 10 %
Distillates, Petroleum, Hydrotreated Light**	64742-47-8	< 10 %
Methyl Amyl Ketone	110-43-0	< 10 %
N-Heptane*	142-82-5	< 10 %
Naphtha, petroleum, hydrotreated light*	64742-49-0	< 10 %
1-Butanol	71-36-3	< 10 %
Propylene Glycol Monomethyl Ether Acetate	108-65-6	< 10 %
Isobutyl Acetate	110-19-0	< 5 %
N-Propyl Acetate	109-60-4	< 5 %

1,2,4-Trimethylbenzene	95-63-6	< 5 %

Note: ** This product may be composed, in whole or in part, of any the following refinery streams: Distillates (petroleum), hydrotreated light (CAS No. 64742-47-8). Heavy hydrodesulfurized naphtha (petroleum) (CAS No. 64742-82-1). * This product may contain a mix of C6-C8 alkanes and C7-C8 cycloalkanes and cyclical/linear branch heptane which may include CAS# 426260-76-6, 64742-49-0, 589-34-4, 108-87-2, 591-76-4, 565-59-3 and/or 617-78-7.

4. FIRST-AID MEASURES

Eye Contact: If in eyes: 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. Remove contact lens if easy to do. Do not use eye ointment.

Skin Contact: If on skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not reuse clothing and shoes until cleaned. If skin surface is damaged, apply a clean dressing and seek 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 footwear which cannot be decontaminated.

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

Ingestion: If swallowed: 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 the left side with head down. Do not leave victim unattended.

Note to Physicians:

INHALATION: Inhalation overexposure can produce toxic effects. Monitor for respiratory distress. If cough or difficulty breathing develops, evaluate for upper respiratory tract inflammation, bronchitis, and pneumonia. Administer supplemental oxygen with assisted ventilation, as required.

This material (or a component) sensitizes the heart to the effects of sympathomimetic amines. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in individuals exposed to this material. Administration of sympathomimetic drugs should be avoided.

INGESTION: If ingested, this material presents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. Consider activated charcoal and/or gastric lavage. If patient is obtunded, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position. Urine acetone test may be helpful in diagnosis. Hemodialysis should be considered in severe intoxication. Repeated excessive exposure may aggravate preexisting blood disease (anemia).

Most Important Symptoms/Effects:

Eye Contact: Causes severe irritation. Liquid contact may cause: redness. stinging. swelling. tearing. burning. blurred vision. change of vision. corneal burns. eye damage. Vapors may cause: discomfort. pain. conjunctivitis.

Skin Contact: May cause moderate to severe irritation. Contact may cause: redness. burning. itching. Prolonged and repeated exposure may cause: blistering. fissured dermatitis. sensitization. cyanosis of the extremities. tissue destruction. ulceration. May cause more severe response on covered skin (under clothing, gloves). Prolonged and repeated contact with skin can cause defatting and drying of the skin which may result in skin irritation and dermatitis.

Skin Absorption: Toxic. Harmful if absorbed through skin. May be absorbed through the skin and cause effects similar to inhalation or ingestion.

Inhalation: May cause severe irritation. Inhalation overexposure may lead to central nervous system depression producing effects such as: dizziness. headache. nausea. fatigue. delirium. drowsiness. loss of consciousness. Breathing high concentrations of this material, for example, in an enclosed space or by intentional abuse, can cause irregular heartbeats which can cause death. Vapors may irritate: nose. throat. respiratory tract. May cause: hoarseness. coughing. chest pain. difficulty breathing. Prolonged or repeated contact may cause: kidney and liver damage. High vapor concentrations may cause: blurred vision. blindness. coma. death. Observation in animals include middle ear lining damage upon exposure to vapors of isopropanol. However, the relevance of this to humans is unknown. In animals, effects have been reported on the following organs: blood (hemolysis). secondary effects to the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits.

Ingestion: May cause mild to severe irritation. May cause: gastrointestinal irritation. diarrhea. nausea. pain. central nervous system depression. May cause effects similar to inhalation. Aspiration can result in severe lung damage or death. May cause damage to the: kidneys. liver. Advanced stages may cause: unconsciousness. coma. possible death due to respiratory failure. In animals, effects have been reported on the following organs: blood (hemolysis). secondary effects to the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits. Cardiovascular effects include shallow rapid pulse with pallor (loss of color in the face) followed by flushing (redness of the face). Also, progressive CNS depression, respiratory insufficiency and ventricular fibrillation leads to death. Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Carbon dioxide. Dry chemical. Foam. Water spray. Water fog. DO NOT USE: Direct water stream. Water may be ineffective but should be used to cool fire-exposed structures and vessels. Carbon dioxide and inert gas can displace oxygen. Use caution when applying carbon dioxide or inert gas in confined spaces.

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. Do not use direct water stream. May spread fire. Avoid water accumulation. Product may reignite and burn on the water's surface. If container is not properly cooled, it can rupture in the heat of a fire. Run-off from fire control may cause pollution.

Fire and Explosion Hazards: HIGHLY 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. This material releases vapors at or below ambient temperatures. This material may produce a floating fire hazard. 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. Vapors may form explosive mixture with air. Containers may explode in the heat of a fire. Flame may be invisible. Approach fire with caution. May form explosive peroxides. Keep away from electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe. Product can accumulate a static charge which may cause a fire or explosion. Vapors may be heavier than air. May travel long distances along the ground before igniting and flashing back to vapor source. Flammable mixtures may exist within the vapor space of containers at room temperature. Flammable concentrations of vapor can accumulate at temperatures above flash point.

Hazardous Combustion Products: Carbon dioxide. Carbon monoxide. Smoke. Fumes. Aldehydes. Unburned hydrocarbons. Products of incomplete combustion. Unidentifiable organic materials. Formaldehyde. Incompletely burned carbon compounds. Original material. Irritating and/or toxic gases. Carbon oxides. Hydrocarbons. Acrid fumes.

6. ACCIDENTAL RELEASE MEASURES

Spill Clean-Up Procedures: HIGHLY 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. Use non-sparking tools and equipment. Do not touch or walk through spilled material. Shut off source of leak if safe to do so. Prevent entry into basements, low areas, or confined areas. A vapor suppressing foam may be used to reduce vapors. Ground and bond all containers and handling equipment. Remove spillage immediately from hard, smooth walking areas. Water mist or spray may be used to reduce or disperse vapors; but, it may not prevent ignition in closed spaces. This material will float on water and its run-off may create an explosion or fire hazard. Keep upwind of leak or spill. Stop the flow of material, if this is without risk. Dike far ahead of liquid spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Soak up residue with non-flammable absorbent material. Place in non-leaking containers for immediate disposal. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs. CAUTION: Spilled material may be slippery.

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. Always open containers slowly to allow any excess pressure to vent. A static electrical charge can accumulate when this material is flowing through pipes, nozzles or filters and when it is agitated. Do not fill any portable container in or on a vehicle. DO NOT use compressed air for filling, discharing or other handling operations. Always keep nozzle in contact with the container throughout the loading process. Bond and ground transfer containers and equipment. This product can form ignitable vapor-air mixture inside storage tanks and can accumulate static electricity during transfer and storage, even with proper grounding and bonding. Additional precautions beyond standard grounding and bonding may be necessary to prevent static discharge and fire/explosion hazards. Additional measures include, but are not limited to, inerting tank head space with nitrogen, adding anti-static agents, and reducing pump flow velocity during transfer to 1 meter/second or less. Consult NFPA 77, NFPA 69 and API RP 2003 for additional information and preventative measures. Observe precautions pertaining to confined space entry.

Storage: HIGHLY 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. Minimize exposure to air. Peroxides may form upon prolonged storage. Exposure to light, heat or air significantly increases peroxide formation. If evaporated to a residue, the mixture of peroxides residue and material vapor may explose when exposed to heat or shock. If peroxide formation is suspected, do not open or move container. Periodically test for peroxide formation on long-term storage. Do not store in: Aluminum. Copper. Galvanized iron. Galvanized steel. Protect containers against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes. Containers should be able to withstand pressures expected from warming and cooling in storage. This flammable liquid should be stored in a separate safety cabinet or room. A refrigerated room is preferable for materials with a flash point temperature lower than 70 F (21 C). All electrical equipment in areas where this material is stored or handled should be installed in accordance with applicable regulatory requirements and the National Electrical Code. Ample fire water supply should be available. A fixed sprinkler/deluge system is recommended. Drums must be equipped with self-closing valves, pressure vacuum bungs and flame arresters. Store only in approved containers. See Section 10 for incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Guidelines:

Component	Limits
Toluene	300 ppm Ceiling; 200 ppm TWA
Methyl Isobutyl Ketone	100 ppm TWA; 410 mg/m3 TWA
Acetone	1000 ppm TWA; 2400 mg/m3 TWA
Xylene (Mixed Isomers)	100 ppm TWA; 435 mg/m3 TWA
Methyl Ethyl Ketone	200 ppm TWA; 590 mg/m3 TWA
Ethylbenzene	100 ppm TWA; 435 mg/m3 TWA
Methanol	200 ppm TWA; 260 mg/m3 TWA
Isopropyl Alcohol	400 ppm TWA; 980 mg/m3 TWA
2-Butoxyethanol	50 ppm TWA; 240 mg/m3 TWA; (Skin)
N-Butyl Acetate	150 ppm TWA; 710 mg/m3 TWA
Methyl Amyl Ketone	100 ppm TWA; 465 mg/m3 TWA
N-Heptane	500 ppm TWA; 2000 mg/m3 TWA
1-Butanol	100 ppm TWA; 300 mg/m3 TWA
Isobutyl Acetate	150 ppm TWA; 700 mg/m3 TWA
N-Propyl Acetate	200 ppm TWA; 840 mg/m3 TWA

ACGIH Exposure Guidelines:

Component	Limits
Toluene	20 ppm TWA
Methyl Isobutyl Ketone	20 ppm TWA; 75 ppm STEL
Acetone	500 ppm TWA; 750 ppm STEL
Xylene (Mixed Isomers)	100 ppm TWA; 150 ppm STEL
Methyl Ethyl Ketone	200 ppm TWA; 300 ppm STEL
Ethylbenzene	20 ppm TWA
Methanol	200 ppm TWA; 250 ppm STEL; (Skin)
Isopropyl Alcohol	200 ppm TWA; 400 ppm STEL
2-Butoxyethanol	20 ppm TWA
N-Butyl Acetate	150 ppm TWA; 200 ppm STEL
Distillates, Petroleum, Hydrotreated Light	200 mg/m3 TWA (application restricted to conditions in which there are negligible aerosol exposures); (Skin)
Methyl Amyl Ketone	50 ppm TWA
N-Heptane	400 ppm TWA (listed under Heptane, all isomers); 500 ppm STEL (listed under Heptane, all isomers)
1-Butanol	20 ppm TWA
Isobutyl Acetate	150 ppm TWA
N-Propyl Acetate	200 ppm TWA; 250 ppm STEL
1,2,4-Trimethylbenzene	25 ppm TWA

Note:

* MANUFACTURER RECOMMENDED EXPOSURE LIMIT: TWA of 100 ppm for Petroleum Distillate - Stoddard Solvent. * ACGIH TLV for Naphtha (Petroleum), Hydrotreated Light: 247 ppm (1200 mg/M3) 8 hour(s) (TWA). Notes: The TLV for the hydrocarbon solvent is based on the procedure described in Appendix H ("Reciprocal Calculations Method for Certain Refined Hydrocarbon Solvent Vapors") of the ACGIH TLVs and BEIs guidelines. The GGV mixture (ACGIH TLV) is based on Column B (McKee et al., 2005) of Table 1 ("Group Guidance Values") of Appendix H. *US Workplace Environmental Exposure Level (WEEL) Guides (2009) lists the TWA for 2-methoxy-1-methylethyl acetate as 50 ppm.

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

Eye/Face Protection: Wear chemical safety goggles and a full face shield while handling this product. 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: Butyl rubber. Neoprene. 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 air-purifying respirator with: Organic vapor cartridge. 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. Rubber boots. Protective clothing.

General Hygiene Conditions: Wash with soap and water before meal times and at the end of each work shift. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical, especially before eating or smoking. Handle in accordance with good industrial hygiene and safety practice. 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.
Odor Threshold: N.D.
pH: N.A.
Freezing Point (deg. F): N.D.
Melting Point (deg. F): N.D.
Initial Boiling Point or Boiling Range: > 100 °F
Flash Point: < 40 °F
Flash Point Method: TCC.
Evaporation Rate (nBuAc = 1): N.D.
Flammability (solid, gas): N.D.
Lower Explosion Limit: ~0.9
Upper Explosion Limit: ~14
Vapor Pressure (mm Hg): N.D.
Vapor Density (air=1): >1
Specific Gravity or Relative Density: 0.82 - 0.85 @ 25 Deg. C
Solubility in Water: Moderate-Appreciable
Partition Coefficient (n-octanol/water): N.D.
Autoignition Temperature: No Data
Decomposition Temperature: N.D.
Viscosity: N.D.
% Volatile (wt%): 100
VOC (wt%): 80 - 100 %
VOC (lbs/gal): 5.46 - 7.08
Fire Point: N.D.

10. STABILITY AND REACTIVITY

Reactivity: No data available.

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur under normal conditions. Contact with strong oxidizers, strong mineral or organic acids, and strong bases may cause a violent or explosive reaction. May be corrosive to lead, aluminum, magnesium, and platinum. May react with metallic aluminum or magnesium and generate hydrogen gas. Under normal storage conditions peroxides may accumulate and explode when subjected to heat or shock. Distillation or evaporation increases peroxide formation and increases the explosion hazard.

Conditions to Avoid: Avoid contact with heat, sparks, electric arcs, other hot surfaces, and open flames. Avoid other ignition sources. Avoid contact with air. Do not distill to near dryness. Do not store or handle in aluminum equipment at temperatures above 122 F. Forms peroxides of unknown stability. Product can oxidize at elevated temperatures.

Incompatible Materials: Strong acids. Alkalies. Oxidizing agents. Halogens or halogen compounds. Liquid chlorine. Hydrogen peroxide. Oxygen. Acids. Amines. Bases. Copper or copper alloys. Strong oxidizing agents. Strong reducing agents. Potassium tert-butoxide. Pyridines. Chromium trioxide. Aliphatic amines. Bromine. Bromine trifluoride. Bromoform. Chloroform. Chromyl chloride. Dioxygen difluoride with solid carbon dioxide. Hexachloromelamine. Nitric compounds. Plastics. Platinum with nitrosyl chloride. Rayon. Sodium hypobromite. Sodium hypoiodite. Sulfur dichloride. Thiotriazole perchlorate. 1,1,1-Trichloroethane. Trichloromelamine. Activated carbon. Strong alkalies. Molten sulfur. Halogenated compounds. Caustics. Ammonia. Isocyanates. Perchlorates. Nitrates. Sulfuric acid. Rubber. Coatings. Alkali metals. Acetyl bromide. Chlorine. Chromic anhydride. Metals. Magnesium. Potassium. Zinc. Aluminum. Platinum. Strong bases. Halogens. Chlorinated compounds. Aldehydes. Alkanolamines. Ethylene oxide. Oleum. Moisture. Acetaldehyde. Ketones. Acid anhydrides. Permanganates. Iron salts. Carbony dichloride (phosgene). Trinitromethane. Barium perchlorate. Dioxygenyl tetrafluoroborate. Nitroform. Perchloric acid. Hypochlorous acid. Urea formaldehyde. Hexamethylene diisocyanate. Halogenated organics. Aluminum isoproproxide + crotonaldehyde + heat. Sodium dichromate + sulfuric acid. Hydrogen + palladium. Hydrogen peroxide-sulfuric acid combination. May attack some forms of plastics, rubbers, and coatings. Nitric acid. Sodium hydroxide. Perchloric Acid. Alkali metal hydroxides. Chlorosulfonic acid. Alumina. Peroxides. Polymerization initiators. Silica gel. May attack some forms of plastic. Chromates. Strong mineral acids. Nitric Acid.

Hazardous Decomposition Products: Carbon dioxide. Carbon monoxide. Aldehydes. Hydrocarbons. Unidentifiable organic materials. Unidentifiable organic materials. Carbon oxides. Formaldehyde. Hydrogen gas. Irritating and/or toxic gases. Ketones. Organic acids. Smoke. Fumes. Unburned hydrocarbons. Combustion products: Products of incomplete combustion.

11. TOXICOLOGICAL INFORMATION

Component	Oral LD50	Dermal LD50	Inhalation LC50
Toluene	Rat: 636 mg/kg	Rabbit: 8390 mg/kg	4H Rat: 12.5 mg/L
Methyl Isobutyl Ketone	Rat: 2080 mg/kg	Rabbit: > 16000 mg/kg	4H Rat: 8.2 mg/L
Acetone	No Data	No Data	8H Rat: 50100 mg/m3
Xylene (Mixed Isomers)	Rat: 4300 mg/kg	No Data	4H Rat: 47635 mg/L
Methyl Ethyl Ketone	No Data	No Data	8H Rat: 23500 mg/m3
Ethylbenzene	Rat: 3500 mg/kg	Rabbit: 15354 mg/kg	4H Rat: 17.2 mg/L
Methanol	Rat: 100 mg/kg	No Data	4H Rat: 3 mg/L
Isopropyl Alcohol	Rat: 4396 mg/kg	Rabbit: 12800 mg/kg	8H Rat: 16000 ppm
2-Butoxyethanol	Rat: 470 mg/kg	Rabbit: 220 mg/kg	4H Rat: 2.2 mg/L
N-Butyl Acetate	No Data	Rabbit: > 17600 mg/kg	4H Rat: 390 ppm
Distillates, Petroleum, Hydrotreated Light	Rat: > 5000 mg/kg	Rabbit: > 2000 mg/kg	4H Rat: > 5.2 mg/L
Methyl Amyl Ketone	Rat: 1600 mg/kg	Rabbit: 13 ml/kg	4H Rat: > 2000 ppm
N-Heptane	Mouse: 5000 mg/kg	Rabbit: 3000 mg/kg	4H Rat: 103 g/m3
Naphtha,	Rat: > 5000 mg/kg	Rabbit: > 3160 mg/kg	4H Rat: 73680 ppm

petroleum, hydrotreated light			
1-Butanol	Rat: 790 mg/kg	Rabbit: 3400 mg/kg	4H Rat: 8000 ppm
Propylene Glycol Monomethyl Ether Acetate	Rat: 8532 mg/kg	Rabbit: > 5 g/kg	No Data
Isobutyl Acetate	Rat: 13400 mg/kg	Rabbit: > 17400 mg/kg	No Data
N-Propyl Acetate	Rat: 9370 mg/kg	Rabbit: > 20 ml/kg	No Data
Water	Rat: > 90 ml/kg	No Data	No Data
1,2,4-Trimethylbenzene	Rat: 3280 mg/kg	Rabbit: > 3160 mg/kg	4H Rat: 18 g/m3

Acute Toxicity Estimate (ATE):

Oral: 970 mg/kg (may vary)
Inhalation Vapor: 14.4715 mg/L (may vary)
Inhalation Dust/Mist: 73.7157 mg/L (may vary)

Routes of Exposure: Absorption. Eyes. Ingestion. Inhalation. Skin.

Eye Contact: Causes severe irritation. Liquid contact may cause: redness. stinging. swelling. tearing. burning. blurred vision. change of vision. corneal burns. eye damage. Vapors may cause: discomfort. pain. conjunctivitis.

Skin Contact: May cause moderate to severe irritation. Contact may cause: redness. burning. itching. Prolonged and repeated exposure may cause: blistering. fissured dermatitis. sensitization. cyanosis of the extremities. tissue destruction. ulceration. May cause more severe response on covered skin (under clothing, gloves). Prolonged and repeated contact with skin can cause defatting and drying of the skin which may result in skin irritation and dermatitis.

Skin Absorption: Toxic. Harmful if absorbed through skin. May be absorbed through the skin and cause effects similar to inhalation or ingestion.

Inhalation: May cause severe irritation. Inhalation overexposure may lead to central nervous system depression producing effects such as: dizziness. headache. nausea. fatigue. delirium. drowsiness. loss of consciousness. Breathing high concentrations of this material, for example, in an enclosed space or by intentional abuse, can cause irregular heartbeats which can cause death. Vapors may irritate: nose. throat. respiratory tract. May cause: hoarseness. coughing. chest pain. difficulty breathing. Prolonged or repeated contact may cause: kidney and liver damage. High vapor concentrations may cause: blurred vision. blindness. coma. death. Observation in animals include middle ear lining damage upon exposure to vapors of isopropanol. However, the relevance of this to humans is unknown. In animals, effects have been reported on the following organs: blood (hemolysis). secondary effects to the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits.

Ingestion: May cause mild to severe irritation. May cause: gastrointestinal irritation. diarrhea. nausea. pain. central nervous system depression. May cause effects similar to inhalation. Aspiration can result in severe lung damage or death. May cause damage to the: kidneys. liver. Advanced stages may cause: unconsciousness. coma. possible death due to respiratory failure. In animals, effects have been reported on the following organs: blood (hemolysis). secondary effects to the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits. Cardiovascular effects include shallow rapid pulse with pallor (loss of color in the face) followed by flushing (redness of the face). Also, progressive CNS depression, respiratory insufficiency and ventricular fibrillation leads to death. Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction.

Medical Conditions Aggravated by Exposure to Product: Kidney disorders. Liver disorders. Respiratory system disorders. Skin disorders. Central nervous system disorders. Heart disorders. Auditory System Disorders. Eye disorders. Digestive tract disorders. Pancreas disorders. Impaired pulmonary function. Dermatitis. Asthma. Inflammatory or fibrotic pulmonary disease. Impaired respiratory function. Lung disorders. Persons also exposed to acetic acid or propanol might be more sensitive, as these are metabolites of propyl acetate.

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. Prolonged exposure to high concentrations can cause central neurological depression and EEG abnormalities. Drinking alcohol may worsen the effects resulting from exposure to this product. 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. Repeated inhalation exposure of pregnant animals to very high vapor concentrations has produced toxicity in the developing offspring but only at doses that were toxic to the maternal animals. Repeated oral exposure of laboratory animals to very large amounts of acetone in their drinking water produced anemia and effects on the testis. Repeated dermal exposure in laboratory animals did not result in tumor formation. The weight of evidence suggests that this substance in not genotoxic. Prolonged or repeated overexposure to xylene, a component of this product, has been associated with hearing damage in laboratory animals. Simultaneous exposure to Methyl Ethyl Ketone (MEK) and n-Hexane can potentiate the risk of adverse effects from n-Hexane on the peripheral nervous system. Chronic overexposure to methyl alcohol may cause liver and kidney injury and permanent central nervous system injury. 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 the right side. Repeated Dose Toxicity: In animals, effects have been reported on the following organs: Kidney. Liver. Kidney effects have been observed in male rats. These effects are believed to be species specific and unlikely to occur in humans. Observations in animals include: Lethargy. Isopropyl alcohol's lethal dose for humans is estimated at 100 ml. In animals, effects have been reported on the following organs: blood (hemolysis) and secondary effects on the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits. Exposure to high concentrations of this material may increase the sensitivity of the heart to certain drugs. Persons with pre-existing heart disorders may be more susceptible to this effect. The symptoms can include the loss of memory, the loss of intellectual capacity and the loss of coordination. 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. May affect sense of balance with chronic exposure.

Cancer Information:
This product contains 0.1% or more of the following chemicals listed by NTP, IARC or OSHA as known or possible carcinogens:
Methyl isobutyl ketone
ethylbenzene

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: No data available.

Chemical Fate Information: No data available.

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: F005, F003 & D001

Note: When xylene and ethyl benzene are a spent solvent, they are classified as a hazardous waste from a nonspecific source (F003), as stated in 40 CFR 261.31. An additional EPA Hazardous Waste Number may include: D018. When toluene is a spent solvent, it is classified as a hazardous waste from a nonspecific source (F005), as stated in 40 CFR 261.31. When methyl isobutyl ketone is a spent solvent, it is classified as a hazardous waste from a nonspecific source (F003), as stated in 40 CFR 261.31.

When acetone is a spent solvent, it is classified as a hazardous waste from a nonspecific source (F003), as stated in 40 CFR 261.31. When methyl ethyl ketone is a spent solvent, it is classified as a hazardous waste from a nonspecific source (F005), as stated in 40 CFR 261.31. When methanol is a spent solvent, it is classified as a hazardous waste from a nonspecific source (F003), as stated in 40 CFR 261.31. When n-Butyl alcohol is a spent solvent, it is classified as a hazardous waste from a nonspecific source (F003), as stated in 40 CFR 261.31.

Disposal Method: Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. 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. Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

14. TRANSPORT INFORMATION

DOT (Department of Transportation):

Identification Number:	UN1263
Proper Shipping Name:	PAINT RELATED MATERIAL
Hazard Class:	3
Packing Group:	II
Label Required:	FLAMMABLE
Reportable Quantity (RQ):	1000# (Toluene); 5000# (Methyl Isobutyl Ketone); 5000# (Acetone); 100# (Xylene-mixed isomers); 5000# (Methyl Ethyl Ketone); 1000# (Ethyl Benzene); 5000# (Methanol); 5000# (Butyl Acetate); 5000# (n-Butyl Alcohol); 5000# (Isobutyl Acetate)

15. REGULATORY INFORMATION

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 Hazards:

Immediate (Acute)	Delayed (Chronic)	Fire Hazard	Pressure Release	Reactive
Yes	Yes	Yes	No	No

Regulated Components:

Component	CAS Number	CERCLA RQ	SARA EHS	SARA 313	U.S. HAP	WI HAP	Prop 65
Toluene	108-88-3	Yes	No	Yes	Yes	Yes	Yes
Methyl Isobutyl Ketone	108-10-1	Yes	No	Yes	Yes	Yes	Yes
Acetone	67-64-1	Yes	No	No	No	No	No
Xylene (Mixed Isomers)	1330-20-7	Yes	No	Yes	Yes	Yes	No
Methyl Ethyl Ketone	78-93-3	Yes	No	No	No	No	No
Ethylbenzene	100-41-4	Yes	No	Yes	Yes	Yes	Yes
Methanol	67-56-1	Yes	No	Yes	Yes	No	Yes
Isopropyl Alcohol	67-63-0	No	No	No	No	No	No
2-Butoxyethanol	111-76-2	No	No	Yes	No	Yes	No
N-Butyl Acetate	123-86-4	Yes	No	No	No	No	No
Methyl Amyl Ketone	110-43-0	No	No	No	No	Yes	No
1-Butanol	71-36-3	Yes	No	Yes	No	Yes	No
Isobutyl Acetate	110-19-0	Yes	No	No	No	No	No
1,2,4-Trimethylbenzene	95-63-6	No	No	Yes	No	Yes	No

***Prop 65 - May Contain the Following Trace Components:**

This product may contain trace amounts of other chemicals, known in the State of California to cause cancer and birth defects or other reproductive harm.

Clean Water Act:

This material may be 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.

16. OTHER INFORMATION

Hazard Rating System

Health:	3*
Flammability:	3
Reactivity:	1

* = Chronic Health Hazard

NFPA Rating System

Health:	2
Flammability:	3
Reactivity:	1
Special Hazard:	None

SDS 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

SDS Prepared by: JAK

Reason for Revision: Changes made throughout the SDS. New format.

Revised: 12-01-2014
Replaces: 08-22-2012

The data in this 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.