03/06/96

# HYDRITE ®

#### MATERIAL SAFETY DATA SHEET

06/14/96

PRODUCT NAME: RC LACQUER SOLVENT

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MANUFACTURED BY: HYDRITE CHEMICAL CO.

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MSDS#:HY961RC0040XX

PREPARED BY:NAO

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#### SECTION I - PRODUCT INFORMATION

TRADE NAME: RC LACQUER SOLVENT CHEMICAL NAME SYNONYMS: RC Lacquer Thinner

C.A.S. REGISTRY #: Mixture

CHEMICAL FAMILY: Oxygenated, Aliphatics & Aromatics

FORMULA: Hydrocarbon Mixture

DOT PROPER SHIPPING NAME: PAINT RELATED MATERIAL

D.O.T. HAZARD CLASS: 3 (FLAMMABLE LIQUID)

D.O.T. IDENTIFICATION #: UN1263 D.O.T. LABEL: FLAMMABLE

#### SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT	TLV LEVEL	PEL LEVEL
Methyl Ethyl Ketone Toluene Methyl Isobutyl Ketone Xylene (Mixed Isomers) Ethylbenzene Acetone n-Butyl Acetate Ethyl Acetate Ethyl Acetate n-Butyl Alcohol Isopropyl Alcohol Ethyl Alcohol n-Propyl Acetate	20-65% 14-46% 0-20% 0-20% 0-7% 0-14% 0-7% 0-6% 0-5% 0-5% 0-5% 0-5%	200 ppm 50 ppm-skin 50 ppm 100 ppm 100 ppm 750 ppm 150 ppm 400 ppm C50 ppm-skin 400 ppm 1000 ppm 200 ppm	200 ppm 100 ppm 50 ppm 100 ppm 100 ppm 750 ppm 150 ppm 400 ppm C50 ppm-skin 400 ppm 1000 ppm

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#### SECTION II - HAZARDOUS INGREDIENTS

Isopropyl Acetate	0-5%	250 ppm	250 ppm
Propylene Glycol Monomethyl Ether	0-4%	100 ppm	100 ppm
Propylene Glycol Monomethyl Ether Acetate	0-4%	Not Estab.	Not Estab.
Methanol	0-4%	200 ppm-skin	200 ppm-skin
Methyl Amyl Ketone	0-4%	50 ppm	100 ppm
Isobutyl Acetate	0-4%	150 ppm	150 ppm
2-Butoxyethanol	0-4%	25 ppm-skin	25 ppm-skin
Cyclohexanone	0-3%	25 ppm-skin	25 ppm-skin
Solvent Naphtha (Petroleum), Light Aliphatic		* 300 ppm	* 300 ppm
Methylhexanes	0-3%	Not Estab.	Not Estab.
Isobutyl Alcohol	0-2%	50 ppm	50 ppm
n-Hexane	0-2%	50 ppm	50 ppm
n-Heptane	0-2%	400 ppm	400 ppm
* Mixed Chlorinateds	0-2%	* 25 ppm	* 25 ppm
Solvent Naphtha Medium Aliphatic	0-2%	* 100 ppm	* 100 ppm
Solvent Naphtha (Petroleum), Light Aromatic	0-5%	Not Estab.	Not Estab.
CONTAINS:	0 00	0.5	05
1,2,4-Trimethylbenzene	0-3%	25 ppm	25 ppm

NOTE: C denotes Ceiling Limit. \* Exposure Limit for VM&P Naphtha. \* Exposure Limit for Stoddard Solvent. \* Mixed Chlorinated Ingredients may include: Methylene Chloride; Perchloroethylene; 1,1,1-Trichloroethane; and Trichloroethylene. Exposure Limits given are those for the Chlorinated Ingredients having the lowest limit values. This product is a variable blend. The compounds listed have been identified by analysis of a typical blend of the product.

SECTION III - PHYSICAL DATA

BOILING POINT (DEG. F): > 100 SPECIFIC GRAVITY: ~0.82-0.84 PERCENT VOLATILE VAPOR PRESSURE (MM HG): Not Estab. SY VOLUME%: 100 % EVAPORATION RATE(nBuAc): Not Estab.

SOLUBILITY IN WATER: Mod-Appreciable

APPEARANCE AND ODOR: Clear, colorless to faint yellow liquid. Solvent odor.

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#### SECTION IV - FIRE EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED): < 40 Deg. F. (TCC).

FLAMMABLE LIMITS LEL: ~1

UEL: ~15

EXTINGUISHING MEDIA: Water spray. Dry Chemical. Carbon Dioxide. Alcohol Foam.

SPECIAL FIRE FIGHTING PROCEDURES: Evacuate area of unprotected personnel. Wear protective clothing including a NIOSH-Approved self-contained breathing apparatus. Cool fire-exposed containers with water spray. Avoid water accumulation. Product may float and be reignited at water's surface. Run-off from fire control may cause pollution.

UNUSUAL FIRE EXPLOSION HAZARDS: FLAMMABLE LIQUID. A vapor accumulation may flash and/or explode if ignited. Vapors are heavier than air and may travel to source of ignition. 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 vacuum equipment, 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.

#### SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: Not Established (OSHA 29 CFR 1910.Z-1-A) Not Established (ACGIH 1995-96) Exposure Limits for product are not established. Use Exposure Limits for individual components as a quide.

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#### EFFECTS OF OVEREXPOSURE

EYE CONTACT: Liquid is severely irritating to the eyes. High vapor concentrations are also irritating.

SKIN CONTACT: May cause mild irritation to skin. Prolonged and repeated contact with skin can cause defatting and drying of the skin which may result in skin irritation and dermatitis. May be harmful if absorbed through skin.

INHALATION: Vapors may cause irritation to the nose, throat and respiratory tract. Inhalation overexposure can lead to central nervous system depression producing effects such as headaches, nausea, dizziness and loss of consciousness. Extreme exposures may cause other central nervous system effects including death. Repeated overexposure may cause liver and kidney damage.

INGESTION: Toxic by ingestion. May be harmful if swallowed. Liquid ingestion may result in vomiting; aspiration (breathing in of liquid into the lungs) must be avoided as liquid contact with the lungs can result in chemical pneumonitis and pulmonary edema/hemorrhage. May produce Central Nervous System depression. Large amounts may be fatal. May cause blindness.

OTHER: 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. Preexisting eye, skin, liver, kidney, respiratory, and nervous system disorders may be aggravated by exposure to this product. ROUTES OF EXPOSURE: Product can affect the body if it is inhaled, comes in contact with the eyes or skin, or is swallowed. It may enter the body through the skin. TARGET ORGANS: Eyes. Skin. Respiratory System. Central Nervous System. Liver. Kidneys. Gastrointestinal Tract. Blood. Development of cataracts has been reported in laboratory animals after prolonged repeated skin exposure to acetone. Reports of animal test studies on one or more

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#### SECTION V - HEALTH HAZARD DATA

of the individual ingredients have shown embryo/fetoxic effects. Reports of animal test studies on one or more of the individual ingredients have shown hearing loss and possible effects to the liver, kidneys, lungs, spleen, heart, adrenals, blood, and reproductive system. The relevance of these effects to man is unknown.

#### EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids open during this flushing with water. Call a physician immediately.

SKIN CONTACT :Flush area with water while removing contaminated clothing and shoes. Follow by washing with soap and water. Do not reuse clothing or shoes until cleaned. If irritation persists, get medical attention.

INGESTION: If 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 lungs. CALL A PHYSICIAN immediately. NEVER induce vomiting or give anything by mouth to an unconscious victim.

INHALATION: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. CALL A PHYSICIAN.

#### SECTION VI - REACTIVITY DATA

STABILITY: X STABLE UNSTABLE CONDITIONS TO AVOID: Avoid contact with heat, sparks, electric arcs, other hot surfaces, and open flames.

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 SECTION VI - REACTIVITY DATA		
INCOMPATABILITY: Strong Oxidizing Agents. Acids. Alkalies. Ammonia. Amines. Isocyanates. Halogens or halogen compounds Reducing Agents. Chlorinated compounds. Nitrates. Aldehydes Aluminum.		
HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce Carbon Monoxide, Carbon Dioxide, and unidentifiable materials.	organic	:
HAZARDOUS POLYMERIZATION:MAY OCCUR _X_WILL NOT OCCU	R	
 SECTION VII - SPILL OR LEAK PROCEDURES		
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: FLAMMABLE MATERIAL. Eliminate all sources of ignition. Evacuate unprotected personnel from area. Maintain adequate ventilation. Use proper Safety Equipment. Contain spill, pladrums for proper disposal. Soak up residue with non-flammab absorbent material. Place in non-leaking containers for immedisposal. Flush remaining area with water to remove trace reand dispose of properly. Avoid direct discharge to sewers as surface waters. Notify authorities if entry occurs.	le ediate esidue	
WASTE DISPOSAL METHOD: Observe all Local, State, and Federal Regulations. Dispose of at approved Waste Treatment Facility Reclaim (recycle) solvent. DO NOT pressurize, cut, weld, brasolder, drill, grind or expose empty containers to heat, flasparks or other sources of ignition.	aze,	
 SECTION VIII - SPECIAL PROTECTION INFORMATION		
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CONSULT SAFETY EQUIPMENT DISTRIBUTOR

RESPIRATORY PROTECTION: If recommended Exposure Limits are

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#### SECTION VIII - SPECIAL PROTECTION INFORMATION

exceeded wear: NIOSH-Approved organic respirator. NIOSH-Approved self-contained breathing apparatus. Do not exceed limits established by the respirator manufacturer. Respiratory protection programs must comply with 29 CFR 1910.134.

VENTICATION: Maintain adequate ventilation. Do not use in closed or confined space. Keep levels below recommended Exposure Limits. To determine exposure levels, monitoring should be performed regularly. Use explosion-proof equipment. Avoid mist formation.

PROTECTIVE GLOVES: Chemical - resistant gloves.

EYE PROTECTION: Chemical Safety Goggles. Face shield. Do not wear contact lenses.

OTHER PROTECTIVE EQUIPMENT: Eye-wash station. Safety shower. Rubber apron. Chemical safety shoes. Protective clothing.

#### SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

FLAMMABLE LIQUID. Store in cool, well-ventilated area away
from all sources of ignition and out of direct sunlight. Ground all
equipment to prevent accumulation of static charge. Keep containers
tightly closed. Store away from incompatable materials. Do not
store in unlabeled or mislabeled containers.

OTHER PRECAUTIONS: Avoid contact with skin and eyes. Do not swallow. Use with adequate ventilation. Avoid prolonged or repeated breathing of vapors. Wash thoroughly after handling. Avoid dust or mist formation. Do not eat, drink, or smoke in work area.

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#### SECTION X - SUPPLEMENTAL HEALTH INFORMATION

#### CARCINOGEN CONTENT

% PPM	INGREDIENT	IARC	NTP	OSHA
0-2%	Methylene Chloride	P	P	N
0-2%	Perchloroethylene	P	P	N
0-2%	Trichloroethylene	P	N	N

NOTE: N: Not listed as a known or potential carcinogen in source's list. P: Potential Carcinogen - Substances "which may reasonably be anticipated to be carcinogens" are defined as those for which there is a limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals. Prolonged overexposure has caused toxic effects in the liver and kidneys of experimental animals and has caused cancer in certain laboratory animal tests. The International Agency for Research on Cancer (IARC) has concluded that there is sufficient evidence for the carcinogenicity of Methylene Chloride to experimental animals, and inadequate evidence for the carcinogenicity of Methylene Chloride to humans, resulting in a classification as a 2B animal carcinogen on the IARC list. The National Toxicology Program (NTP) has identified Methylene Chloride as an animal carcinogen. The American Conference of Governmental Hygienists (ACGIH) lists Methylene Chloride as an A2 - Suspected Human Carcinogen. Epidemiology studies of 751 humans chronically exposed to Methylene Chloride in the workplace of which 252 were exposed for a minimum of 20 years did not demonstrate any increase in deaths caused by cancer or cardiac problems. A second study of 2,227 workers confirmed these results. The American Conference of Governmental Hygienists (ACGIH) lists Perchloroethylene as an A3 -Animal Carcinogen. The National Toxicology Program (NTP) has identified Perchloroethylene as an animal carcinogen. The International Agency for Research on Cancer (IARC) has classified Perchloroethylene as probably carcinogenic to humans (Group 2A). Trichloroethylene is listed in Group 2A by IARC, but is not listed by NTP or OSHA. The American Conference of Governmental Hygienists (ACGIH) lists Trichloroethylene as an A5 - Not Suspected as a Human Carcinogen.

LD50 ORAL : No Data LD50 SKIN : No Data LC50 INHALATION : No Data

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The data in this Material Safety Data Sheet relates only 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 a warranty or representation for which HYDRITE CHEMICAL CO. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.