

MATERIAL SAFETY DATA SHEET

MINERAL SPIRITS RULE 66 (<8% AROMATICS)

Product ID: AA100901

Revised: 09-07-2011

Replaces: 09-06-2011

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: MINERAL SPIRITS RULE 66 (<8% AROMATICS)
Synonyms: Mineral Spirits 75
CAS Number: MIXTURE
Chemical Family: Petroleum Hydrocarbon Solvent
Formula: N.A.

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. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: WARNING! FLAMMABLE LIQUID AND VAPOR. Keep away from heat, sparks, and open flame. May cause eye, skin and respiratory irritation. Harmful or fatal if swallowed. Aspiration may cause lung damage. May be harmful or fatal if inhaled.

Physical State: Liquid.
Color: Transparent. Colorless.
Odor: Characteristic hydrocarbon solvent odor.

POTENTIAL HEALTH EFFECTS

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

Target Organs: Eyes. Skin. Respiratory System. Lungs. Mucous Membranes. Central Nervous System. Kidneys. Liver.

Eye Contact: May cause mild irritation. This product can cause transient, mild eye irritation with short-term contact with liquid sprays or mists. Symptoms may include: stinging. watering. redness. swelling.

Skin Contact: May cause mild irritation. This product can cause mild, transient skin irritation with short-term exposure. The degree of irritation will depend on the amount of material that is applied to the skin and the speed and thoroughness that it is removed. Symptoms may include: redness. itching. burning. Prolonged and repeated contact with skin can cause defatting and drying of the skin which may result in skin irritation and dermatitis.

Skin Absorption: No data available.

Inhalation: Vapors or mists may irritate: throat. lungs. respiratory tract. May cause: central nervous system depression. nausea. headache. dizziness. fatigue. drowsiness. unconsciousness. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal.

Ingestion: May cause irritation of the: mouth. throat. esophagus. It can be readily absorbed by the stomach and intestinal tract. Symptoms may include: burning sensation. nausea. vomiting. dizziness. staggering gait. drowsiness. unconsciousness. delirium. other central nervous system effects. Due to its light viscosity, there is a danger of aspiration into the lungs during vomiting. Aspiration can result in severe lung damage or death.

Medical Conditions Aggravated by Exposure to Product: Skin disorders. Respiratory system disorders. Liver disorders. Kidney disorders. Central nervous system disorders.

Other: Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction. Reports have associated repeated and prolonged occupational overexposure to solvents with irreversible brain and nervous system damage (sometimes referred to as "Solvent or Painter's Syndrome").

Cancer Information:

This product contains 0.1% or more of the following chemicals listed by NTP, IARC or OSHA as known or possible carcinogens:

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ethylbenzene

Potential Environmental Effects: See Section 12.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS Number</u>	<u>% by Wt.</u>
Heavy Hydrodesulfurized Naphtha (Petroleum)	64742-82-1	0 - 100 %
Distillates, Petroleum, Hydrotreated Light	64742-47-8	0 - 100 %
Contains:		
Nonane, all isomers	MIXTURE	< 10 %
Trimethylbenzenes, all isomers	25551-13-7	< 2 %
Xylene (Mixed Isomers)	1330-20-7	~ 1 %
Ethylbenzene	100-41-4	< 0.2 %

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).

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. Remove contact lens if easy to do. Do not use eye ointment.

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. If skin surface is damaged, apply a clean dressing and seek medical attention. Do not use ointments. Discard contaminated leather articles such as shoes and belt.

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.

Ingestion: If swallowed, call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. If victim is drowsy or unconscious, place on the left side with head down. Do not leave victim unattended.

Note to Physicians:

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

5. FIRE FIGHTING MEASURES

Extinguishing Media: Water spray. Water fog. Foam. Dry chemical. Carbon dioxide. Water fog and spray are effective in cooling containers and adjacent structures but might cause frothing and/or may not achieve extinguishment. 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. 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. Do not use direct water stream. May spread fire. Run-off from fire control may cause pollution.

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,

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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.

Hazardous Combustion Products: Carbon oxides. Products of incomplete combustion. Smoke. Fumes. Unburned hydrocarbons. Aldehydes.

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. A vapor suppressing foam may be used to reduce vapors. Water spray may reduce vapor, but may not prevent ignition in closed spaces. Use non-sparking tools and equipment. 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. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs. Prevent entry into basements, low areas, or confined areas.

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. Use appropriate grounding and bonding practices. Always open containers slowly to allow any excess pressure to vent. Use non-sparking tools and equipment.

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Guidelines:

<u>Component</u>	<u>Limits</u>
Xylene (Mixed Isomers)	100 ppm TWA; 435 mg/m ³ TWA
Ethylbenzene	100 ppm TWA; 435 mg/m ³ TWA

ACGIH Exposure Guidelines:

<u>Component</u>	<u>Limits</u>
Distillates, Petroleum, Hydrotreated	200 mg/m ³ TWA (application restricted to conditions in which there are negligible aerosol exposures); (Skin)
Light	
Trimethylbenzenes, all isomers	25 ppm TWA
Xylene (Mixed Isomers)	150 ppm STEL; 100 ppm TWA
Ethylbenzene	125 ppm STEL; 100 ppm TWA

Note:

* MANUFACTURER RECOMMENDED EXPOSURE LIMIT: TWA of 100 ppm for Petroleum Distillate - Stoddard Solvent. ** Exposure limit for Nonane. + Vacated 1989 OSHA PEL(s). * Exposure limit for Trimethyl benzene mixed isomers.

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.

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Eye/Face Protection: Wear safety glasses with side shields while handling this product. Wear additional eye protection such as chemical safety goggles when the possibility exists for eye contact with splashing or spraying liquid, or airborne material.

Skin Protection: Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Chemical-resistant. Viton (R). Heavy nitrile rubber.

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 respirator. NIOSH-Approved air-purifying respirator with: Organic vapor cartridge. NIOSH-Approved Supplied Air Respirator (SAR). 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. 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: Transparent. Colorless.

Odor: Characteristic hydrocarbon solvent odor.

Boiling Point (deg. F): 315 - 394

Freezing Point (deg. F): N.D.

Melting Point (deg. F): N.D.

Vapor Pressure (mm Hg): 2 @ 20 C

Vapor Density (air=1): > 1

Solubility in Water: Very slightly soluble in cold water (< 0.1% w/w)

pH: N.A.

Specific Gravity: 0.78

% Volatile (wt%): 100

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

VOC (wt%): 100

VOC (lbs/gal): 783 g/l (w/v)

Viscosity: N.D.

Flash Point: 110 Deg. F.

Flash Point Method: TCC. ASTM D 56.

Lower Explosion Limit: ~ 0.5 %

Upper Explosion Limit: ~ 6 %

Autoignition Temperature: No Data

Fire Point: N.D.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to Avoid: Avoid contact with heat, sparks, electric arcs, other hot surfaces, and open flames. Avoid other ignition sources. Keep away from strong oxidizing conditions and agents.

Incompatible Materials: Strong oxidizing agents. Strong acids. Strong alkalies.

Hazardous Decomposition Products: Carbon monoxide. Carbon dioxide. Smoke. Fumes. Unburned hydrocarbons.

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

11. TOXICOLOGICAL INFORMATION

Component

Oral LD50

Dermal LD50

Inhalation LC50

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Heavy Hydrodesulfurized Naphtha (Petroleum)	Rat: > 5000 mg/kg	Rabbit: > 3160 mg/kg	No Data
Distillates, Petroleum, Hydrotreated Light	Rat: > 5000 mg/kg	Rabbit: > 2000 mg/kg	4H Rat: > 5.2 mg/L
Trimethylbenzenes, all isomers	Rat: 8970 mg/kg	No Data	No Data
Xylene (Mixed Isomers)	Rat: 4300 mg/kg	Rabbit: > 1700 mg/kg	4H Rat: 47635 mg/L
Ethylbenzene	Rat: 3500 mg/kg	Rabbit: 15354 mg/kg	4H Rat: 5000 ppm 4H Rat: 17.2 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: This mixture contains components that are potentially toxic to freshwater and saltwater ecosystems.

Chemical Fate Information: This product will normally float on water. Components will evaporate rapidly. This material may be harmful to aquatic organisms and may cause long term adverse effects in the aquatic environment. The octanol-water partition coefficient (log Kow) for this product is expected to be in the range of 2.1 to 5.

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: D001 and D018

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. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. TRANSPORTATION INFORMATION

DOT (Department of Transportation):

Identification Number: UN1268
Proper Shipping Name: PETROLEUM DISTILLATES, N.O.S. (NAPHTHA SOLVENT)
Hazard Class: 3
Packing Group: III
Label Required: FLAMMABLE
Reportable Quantity (RQ): 100# (Xylene-mixed isomers); 1000# (Ethyl Benzene)

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:

	<u>Immediate (Acute)</u>	<u>Delayed (Chronic)</u>	<u>Fire Hazard</u>	<u>Pressure Release</u>		<u>Reactive</u>		
	Yes	Yes	Yes	No	No	No	No	
Regulated Components:								
Component		CAS	CERCLA	SARA	SARA	U.S.	WI	Prop
		Number	RQ	EHS	313	HAP	HAP	65
Trimethylbenzenes, all isomers		25551-13-7	No	No	No	No	Yes	No
Xylene (Mixed Isomers)		1330-20-7	Yes	No	Yes	Yes	Yes	No
Ethylbenzene		100-41-4	Yes	No	Yes	Yes	Yes	Yes

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

Benzene
Toluene
Naphthalene
Ethylbenzene

Clean Water Act:

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This material 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.

16. ADDITIONAL INFORMATION

Hazard Rating System

Health: 1*

Flammability: 2

Reactivity: 0

* = Chronic Health Hazard

NFPA Rating System

Health: 1

Flammability: 2

Reactivity: 0

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: CSH

Reason for Revision: New format.

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.