

# Material Safety Data Sheet



Zep Inc.  
1310 Seaboard Industrial Blvd.  
Atlanta, GA 30318  
1-877-793-7776

## Section 1. Chemical Product and Company Identification

**Product name** Z-WORKS MOISTURE DISPLACING PENETRANT  
**Product use** Aerosol Penetrant Spray  
**Product code** R221  
**Date of issue** 08/04/09 **Supersedes**

### Emergency Telephone Numbers

**For MSDS Information:**  
Compliance Services 1-877-793-7776

**For Medical Emergency**  
(877) 541-2016 Toll Free - All Calls Recorded

**For Transportation Emergency**  
CHEMTREC: (800) 424-9300 - All Calls Recorded  
In the District of Columbia (202) 483-7616

### Prepared By

Compliance Services  
1420 Seaboard Industrial Blvd.  
Atlanta, GA 30318

## Section 2. Hazards Identification

### Emergency overview

**DANGER !**

\*Hazard Determination System (HDS): Health, Flammability, Reactivity



EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. Do not smoke. CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION. VAPOR HARMFUL. CONTENTS UNDER PRESSURE.

**NOTE:** MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

### Acute Effects

#### Routes of Entry

Dermal contact. Inhalation.

**Eyes** Causes eye irritation. Inflammation of the eye is characterized by redness, watering and itching.

**Skin** Causes skin irritation. Skin inflammation is characterized by itching, scaling, or reddening.

**Inhalation** Over-exposure by inhalation may cause respiratory irritation. High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness. Can cause central nervous system (CNS) depression.

**Ingestion** Harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.

### Chronic effects

Prolonged skin contact may cause dermatitis with drying and cracking of skin. Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, the reproductive system, liver, mucous membranes, brain, skin, eyes, central nervous system (CNS), ears, testes.

### Product/ingredient name

Not available.

**Additional Information: See Toxicological Information (Section 11)**

## Section 3. Composition/Information on Ingredients

	<u>CAS number</u>	
ALIPHATIC NAPHTHA; ligroin; stoddard solvent	8052-41-3	20 - 30
MINERAL SEAL OIL; mineral oil; petrolatum	64742-30-9	5 - 15
BLEND OF ISOBUTANE & PROPANE	74-98-6; 75-28-5	5 - 15
TERPENE HYDROCARBON PROCESSING BY-PRODUCT	68956-56-9	<10
1,2,4-TRIMETHYLBENZENE	95-63-6	<5

## Section 4. First Aid Measures

**Eye Contact** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention immediately.

**Skin Contact** Flush affected skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops.

**Inhalation** Move exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion** Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Get medical attention immediately.

### Section 5. Fire Fighting Measures

National Fire Protection Association (U.S.A.)



**Flash Point** Closed cup: 41.6°C (107°F).

**Flammable Limits** Not available.

**Flammability** EXTREMELY FLAMMABLE LIQUID AND VAPOR. (CSMA) Aerosol that may flash back.

**Fire hazard** CONTENTS UNDER PRESSURE. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.

**Fire-Fighting Procedures** Use an extinguishing agent suitable for the surrounding fire.

### Section 6. Accidental Release Measures

**Spill Clean up** Spills are unlikely due to packaging.

### Section 7. Handling and Storage

**Handling** Put on appropriate personal protective equipment (see section 8). Store and use away from heat, sparks, open flame or any other ignition source. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Empty containers retain product residue and can be hazardous. Watch for accumulation in low confined areas. Wash thoroughly after handling.

**Storage** CONTENTS UNDER PRESSURE. Do not puncture or incinerate container. Do not store above the following temperature: 49°C (120.2°F). Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Keep out of the reach of children.

### Section 8. Exposure Controls/Personal Protection

#### Product name

ALIPHATIC NAPHTHA; ligroin; stoddard solvent

#### Exposure limits

OSHA PEL (United States).

TWA: 100 ppm 8 hour(s).

ACGIH TLV (United States).

TWA: 100 ppm 8 hour(s).

MINERAL SEAL OIL; mineral oil; petrolatum

OSHA PEL (United States).

: 5 mg/m<sup>3</sup> 8 hour(s). Form: Mist

ACGIH TLV (United States).

: 5 ppm 8 hour(s). Form: Mist

BLEND OF ISOBUTANE &amp; PROPANE

ACGIH TLV (United States).

TWA: 800 ppm 8 hour(s).

OSHA PEL (United States).

TWA: 1000 ppm 8 hour(s).

1,2,4-TRIMETHYLBENZENE

ACGIH TLV (United States).

TWA: 25 ppm 8 hour(s).

OSHA PEL (United States).

TWA: 25 ppm 8 hour(s).

#### Personal Protective Equipment (PPE)

**Eyes** Safety glasses.



**Body** Wear appropriate protective clothing to prevent skin contact. Recommended: Neoprene gloves. Nitrile gloves.

**Respiratory** Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Wear appropriate respirator when ventilation is inadequate.

### Section 9. Physical and Chemical Properties

**Physical State** Liquid. [Aerosol.]

**Color** Clear. Colorless.

**pH** Not available.

**Odor** Solvent-like.

**Boiling Point** 151.67°C (305°F)

**Vapor Pressure** Not determined.

**Specific Gravity** 0.8

**Vapor Density** Not determined.

**Solubility** Insoluble in the following materials: cold water and hot water.

**Evaporation Rate** Not determined.

**VOC (Consumer)** 49.9% 3.3 (lbs/gal) 398 (g/l).

**Section 10. Stability and Reactivity**

<b>Stability and Reactivity</b>	The product is stable.
<b>Incompatibility</b>	Keep away from heat, sparks and flame. Reactive or incompatible with the following materials: oxidizing materials.
<b>Hazardous Polymerization</b>	Will not occur.
<b>Hazardous Decomposition Products</b>	carbon oxides (CO, CO <sub>2</sub> )

**Section 11. Toxicological Information****Acute Toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
1,2,4-Trimethylbenzene	LD50 Oral	Rat	5000 mg/kg	-

**Section 12. Ecological Information****Aquatic Ecotoxicity**

Not available.

**Section 13. Disposal Considerations****Waste Information**

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

**Waste Stream** Code: D001  
Classification: - [Hazardous waste.]  
Origin: - [RCRA waste.]

**Section 14. Transport Information**

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
<b>DOT Classification</b>	Not regulated.	Consumer commodity	ORM-D	-	
<b>IMDG Class</b>					

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

PG\* : Packing group

**Section 15. Regulatory Information****U.S. Federal Regulations**

SARA 313 toxic chemical notification and release reporting:

**Product name**

1,2,4-Trimethylbenzene

**Clean Water Act (CWA) 307:** No products were found.

**Clean Water Act (CWA) 311:** No products were found.

**Clean Air Act (CAA) 112 regulated toxic substances:** No products were found.

All Components of this product are listed or exempt from listing on TSCA Inventory.

**State Regulations****California Prop 65**

**WARNING:** This product contains a chemical or chemicals known to the state of California to cause cancer, birth defects or other reproductive harm. :  
Naphthalene

**Section 16. Other Information**

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.  
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution.  
Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*

\*NOTE: Hazard Determination System (HDS) ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.