Material Safety Data Sheet

Zep, Inc.
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Section 1. Chemical Product and Company Identification

Product name IRONCLAD
Product use Corrosion Inhibitor
Product code 1365
Date of issue 06/16/09 **Supersedes** 09/28/05

Emergency Telephone Numbers

For MSDS Information:
Compliance Services 1-877-I-BUY-ZEP (428-9937)

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

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Section 2. Hazards Identification

Emergency overview

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

1 2 0

WARNING !

COMBUSTIBLE. CAUSES EYE AND SKIN IRRITATION.
HARMFUL OR FATAL IF SWALLOWED.

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. Eye contact. Inhalation.

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

Skin Causes skin irritation. May cause skin sensitization. Skin inflammation is characterized by itching, scaling, or reddening.

Inhalation Over-exposure by inhalation may cause respiratory irritation. Inhalation of spray mists or vapors may cause central nervous system depression characterized by headache, dizziness, nausea, and/or stupor. Can cause central nervous system (CNS) depression.

Ingestion May be fatal if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.

Chronic effects

Repeated or prolonged inhalation of vapors may lead to chronic respiratory irritation. 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.

Carcinogenicity

No known significant effects or critical hazards.

Product/ingredient name

Not available.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients	CAS number	% by Weight
LIGHT ALIPHATIC NAPHTHA; solvent naphtha (petroleum), medium aliphatics; formerly: light aromatic naphtha	64742-88-7	70 - 80
PARAFFIN OIL; blend of heavy and light naphthenic petroleum distillate	64742-52-5	<40
CALCIUM CARBONATE; calcite, chalk	471-34-1	<30

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. Continue to rinse for at least 10 minutes. Wash clothing before reuse. Get medical attention if irritation develops.

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

Ingestion Aspiration hazard if swallowed. Can enter lungs and cause damage. 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: 39.44°C (103°F)

Flammable Limits Not available.

Flammability COMBUSTIBLE LIQUID AND VAPOR.

Fire hazard COMBUSTIBLE. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. May emit toxic fumes under fire conditions. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Fire-Fighting Procedures Use dry chemical, CO_2, water spray (fog) or foam.

Section 6. Accidental Release Measures

Spill Clean up Eliminate all ignition sources. Put on appropriate personal protective equipment (see section 8). Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

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. Do not reuse container. Observe label precautions. Wash thoroughly after handling.

Storage Store in original container protected 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 container tightly closed and sealed until ready for use. Do not store in unlabeled containers. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

Product name	Exposure limits
LIGHT ALIPHATIC NAPHTHA; solvent naphtha (petroleum), medium aliphatics; formerly: light aromatic naphtha	**ACGIH TLV (United States).** STEL: 200 ppm 8 hour(s). **OSHA PEL (United States).** TWA: 500 ppm 8 hour(s). **ACGIH TLV (United States).** TWA: 100 ppm 8 hour(s).
PARAFFIN OIL; blend of heavy and light naphthenic petroleum distillate	**OSHA PEL (United States).** TWA: 5 mg/m³ 8 hour(s). Form: Mist **ACGIH TLV (United States).** TWA: 5 mg/m³ 8 hour(s). Form: Mist
CALCIUM CARBONATE; calcite, chalk	**OSHA PEL (United States).** TWA: 5 mg/m³ 8 hour(s). Form: Respirable dust

Personal Protective Equipment (PPE)

Eyes Splash goggles.

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

pH Not applicable

Boiling Point >156.1°C (>313°F)

Specific Gravity 0.83

Solubility Very slightly soluble in the following materials: cold water and hot water.

Color Opaque. Light tan.

Odor Solvent-like.

Vapor Pressure Not determined.

Vapor Density >1 [Air = 1]

Evaporation Rate <1 (Butyl acetate. = 1)

VOC (Consumer) 629.71 (g/l). 5.25 lbs/gal 76%

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Incompatibility Slightly reactive or incompatible with the following materials: oxidizing materials, reducing materials and acids.

Hazardous Polymerization Not available.

Hazardous Decomposition Products carbon oxides (CO, CO_2), sulfur oxides (SO_2, SO_3 etc.)

Section 11. Toxicological Information

Acute Toxicity

Not available.

Section 12. Ecological Information

Environmental Effects No known significant effects or critical hazards.

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
DOT Classification	Not regulated.	Not a DOT controlled material (United States).	-		

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:

No products were found.

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.:
Calcium Carbonate

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.*