



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name IRONCLAD
Product use Liquid Corrosion Inhibitor
Product code 1365
Date of issue 09/16/14 **Supersedes** 03/27/12

Emergency Telephone Numbers

For MSDS Information:
 Technical Services Group
 Telephone (780) 453-8100
 (Business Hours 8:00am - 5:00pm)

For Medical or Transportation Emergency

CANUTEC (24 Hours)
 (613) 996-6666 - Call Collect

Prepared By

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Section 2. Hazards Identification

Emergency overview

WARNING !

FLAMMABLE LIQUID AND VAPOR. COMBUSTIBLE.

Keep away from heat, sparks and flame. Do not breathe vapor or mist. Avoid contact with skin and clothing. Contains material that may cause target organ damage, based on animal data. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use.

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

May cause eye irritation. Inflammation of the eye is characterized by redness, watering and itching.

Skin

May cause skin irritation. Skin inflammation is characterized by itching, scaling, or reddening. Direct contact may cause irritation and redness. Prolonged or repeated contact may dry skin and cause irritation.

Inhalation

Harmful by inhalation. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression.

Ingestion

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

Chronic effects

Contains material which may cause damage to the following organs: blood, kidneys, lungs. Overexposure of this product by inhalation or absorption can produce central nervous system depression resulting in headache, nausea and/or dizziness. Inhalation of spray mists or vapors may cause central nervous system depression characterized by headache, dizziness, nausea, and/or stupor. Repeated or prolonged exposure to the substance can produce target organs damage.

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: 64742-88-7
 light aromatic naphtha

40 - 70

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 if irritation occurs.

Skin Contact

Flush affected skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation

Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention.

Ingestion Aspiration hazard if swallowed. Can enter lungs and cause damage. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Never give anything by mouth to an unconscious person. 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. Get medical attention.

Section 5. Fire Fighting Measures

Flash Point Closed cup: 39.44°C (103°F)

Flammable Limits Not available.

Flammability COMBUSTIBLE LIQUID AND VAPOR.

Auto-ignition Temperature

Fire-Fighting Procedures Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Use dry chemical, CO₂, water spray (fog) or foam.

Fire hazard Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Products of Combustion carbon oxides (CO, CO₂), sulfur oxides (SO₂, SO₃ etc.), and other unidentified organic compounds.

Explosion hazard Not available.

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). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. 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. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

Product name

Distillates (petroleum), hydrotreated light

Exposure limits

CA British Columbia Provincial (Canada, 9/2010). Absorbed through skin.

TWA: 200 mg/m³, (as total hydrocarbon vapour) 8 hour(s).

CA Alberta Provincial (Canada, 4/2009). Absorbed through skin.

8 hrs OEL: 200 mg/m³, (as total hydrocarbon vapour) 8 hour(s).

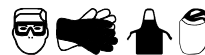
CA Ontario Provincial (Canada, 7/2010). Absorbed through skin.

TWA: 200 mg/m³ 8 hour(s).

Personal Protective Equipment (PPE)

Eyes Recommended: Splash goggles. Face shield.

Hands and Body Recommended: Wear appropriate protective clothing to prevent skin contact. Nitrile gloves. Rubber gloves. Chemical-resistant apron.



Respiratory Recommended: 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. [Viscous liquid.]	Color	Opaque. Tan. [Light]
pH	Not applicable	Odor	Solvent.
Boiling Point	>156.1°C (>313°F)	Vapor Pressure	Not determined.
Specific Gravity	0.83	Vapor Density	>1 [Air = 1]
Solubility	Very slightly soluble in the following materials: cold water and hot water.	Evaporation Rate	<1 (butyl acetate = 1)
Freezing Point		VOC (Consumer)	5250.13 (g/l). 43.81 lbs/gal 76.00%

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Slightly reactive or incompatible with the following materials: oxidizing materials and acids. Incompatible with peroxides. Avoid contact with strong oxidizers, excessive heat, sparks or open flame.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information

Carcinogenicity Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Acute Toxicity**Section 12. Ecological Information**

Environmental Effects	No known significant effects or critical hazards.
Aquatic Ecotoxicity	

Distillates (petroleum), hydrotreated light	-	Acute LC50 2200 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 35 to 75 mm	4 days
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Section 13. Disposal Considerations**Waste Information**

Waste must be disposed of in accordance with applicable 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	Additional information
TDG Classification	Not regulated.	-	-	-		-
IMDG Class						-

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. Limited Quantity: Small quantities of controlled goods are not regulated as Dangerous Goods according to TDG regulations.

PG* : Packing group

Section 15. Regulatory Information**Canada**

WHMIS (Canada) Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
Class D-2B: Material causing other toxic effects (Toxic).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

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.