



Material Safety Data Sheet

ICA 400

HEALTH	2
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	

1. Product and Company Identification

Material name	ICA 400
Patent Number	Not available
Revision date	June-04-2009
Version No.	3
CAS #	Mixture
Product use	Iron Control Agent
Manufacturer information	Clearwater™ International L.L.C. 100 Leetsdale Industrial Drive Leetsdale, PA 15056 US CHEMTREC 1-800-424-9300/703-527-3887
Emergency	CHEMTREC 1-800-424-9300/703-527-3887
Supplier information	Clearwater™ International L.L.C. 100 Leetsdale Industrial Drive Leetsdale, PA 15056 US
Supplier emergency telephone number(s)	CHEMTREC 1-800-424-9300/703-527-3887

2. Hazards Identification

Emergency overview	CAUTION
OSHA regulatory status	May be ignited by heat, sparks or flames. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Components of the product may be absorbed into the body by inhalation, ingestion and through the skin. Combustible liquid and vapor.
Potential health effects	This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Eyes	Do not get this material in contact with eyes.
Skin	Do not get this material in contact with skin.
Inhalation	Do not breathe dust/fume/gas/mist/vapors/spray.
Ingestion	Components of the product may be absorbed into the body by ingestion.
Target organs	Central nervous system. Eyes. Lungs. Respiratory system. Skin.
Potential environmental effects	May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Ethylene Glycol	107-21-1	10 - 30



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4. First Aid Measures

First aid procedures

Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops or persists.
Skin contact	Immediately take off all contaminated clothing. Rinse skin with water.
Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
Ingestion	Rinse mouth.
General advice	If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Flammable properties	Combustible by OSHA criteria.
Extinguishing media	
Suitable extinguishing media	Water spray, fog or regular foam. Dry chemical, CO ₂ , water spray or regular foam.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Protection of firefighters	
Protective equipment and precautions for firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Move containers from fire area if you can do it without risk. Do not scatter spilled material with high pressure water streams. Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out.

6. Accidental Release Measures

Personal precautions	Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unnecessary personnel away. Stay upwind. Keep out of low areas.
Environmental precautions	Prevent further leakage or spillage if safe to do so.
Methods for containment	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Should not be released into the environment. Large Spills: Dike far ahead of liquid spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. After removal flush contaminated area thoroughly with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly. Never return spills in original containers for re-use.



7. Handling and Storage

Handling

Do not handle or store near an open flame, heat or other sources of ignition. Use only with adequate ventilation. Avoid release to the environment. Handle and open container with care. Wash thoroughly after handling.

Storage

Keep away from heat and sources of ignition (spark or flame). Store in a closed container away from incompatible materials. Use care in handling/storage. Refrigeration recommended.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

Components

CAS #

TWA

STEL

Ceiling

Ethylene Glycol

107-21-1

Not established

Not established

100 mg/m3

Engineering controls

Ensure adequate ventilation, especially in confined areas.

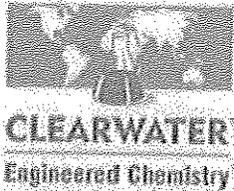
Personal protective equipment

General hygiene considerations

When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Liquid.
Color	Light yellow.
Odor	Ammoniacal
Odor threshold	Not available
Physical state	Liquid.
Form	Liquid.
pH	3.5 - 5
Melting point	30.2 °F (-1 °C) estimated
Freezing point	Not available
Boiling point	132.8 °F (56.3 °C) estimated
Flash point	> 201
Evaporation rate	Not available
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available
Flammability limits in air, lower, % by volume	Not available
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	1.2 - 1.24
Relative density	1.2199 g/cm3 estimated
Solubility (water)	Not available



Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	95 °F (34.61 °C) estimated
Decomposition temperature	Not available
VOC	8.7 % estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Amines. Isocyanates. Strong oxidizing agents. Strong acids. Caustics.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Acute effects	Acute LD50: 46000 mg/kg estimated, Rat, Oral	
Component analysis - LD50		
Toxicology Data - Selected LD50s and LC50s		
Ethylene Glycol	107-21-1	Oral LD50 Rat: 4000 mg/kg; Dermal LD50 Rabbit: 9530 µL/kg
Sensitization	Not expected to be hazardous by OSHA criteria.	
Chronic effects	Not expected to be hazardous by OSHA criteria.	
Carcinogenicity	Not expected to be hazardous by OSHA criteria.	
ACGIH - Threshold Limit Values - Carcinogens		
Ethylene Glycol	107-21-1	A4 - Not Classifiable as a Human Carcinogen
Neurological effects	Not expected to be hazardous by OSHA criteria.	
Further information	This product has no known adverse effect on human health.	

12. Ecological Information

Ecotoxicity	This material is not expected to be harmful to aquatic life.	
Ecotoxicity - Freshwater Algae Data		
Ethylene Glycol	107-21-1	96 Hr EC50 Selenastrum capricornutum: 6500-1300 mg/L
Ecotoxicity - Freshwater Fish Species Data		
Ethylene Glycol	107-21-1	96 Hr LC50 Oncorhynchus mykiss: 41000 mg/L; 96 Hr LC50 Lepomis macrochirus: 27500 mg/L; 96 Hr LC50 Oncorhynchus mykiss: 40761 mg/L [static]; 96 Hr LC50 Pimephales promelas: 49000 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 16000 mg/L [static]
Ecotoxicity - Microtox Data		
Ethylene Glycol	107-21-1	30 min EC50 Photobacterium phosphoreum: 620.0 mg/L; 30 min EC50 Photobacterium phosphoreum: 620 mg/L; 16 Hr EC50 Pseudomonas putida: 10000 mg/L
Ecotoxicity - Water Flea Data		
Ethylene Glycol	107-21-1	48 Hr EC50 water flea: 46300 mg/L



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Environmental effects

Ecotoxicity - Freshwater Algae Data

Ethylene Glycol 107-21-1 96 Hr EC50 Selenastrum capricornutum: 6500-1300 mg/L

Ecotoxicity - Freshwater Fish Species Data

Ethylene Glycol 107-21-1 96 Hr LC50 Oncorhynchus mykiss: 41000 mg/L; 96 Hr LC50 Lepomis macrochirus: 27500 mg/L; 96 Hr LC50 Oncorhynchus mykiss: 40761 mg/L [static]; 96 Hr LC50 Pimephales promelas: 49000 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 16000 mg/L [static]

Ecotoxicity - Microtox Data

Ethylene Glycol 107-21-1 30 min EC50 Photobacterium phosphoreum: 620.0 mg/L; 30 min EC50 Photobacterium phosphoreum: 620 mg/L; 16 Hr EC50 Pseudomonas putida: 10000 mg/L

Ecotoxicity - Water Flea Data

Ethylene Glycol 107-21-1 48 Hr EC50 water flea: 46300 mg/L

13. Disposal Considerations

Disposal instructions

Do not allow this material to drain into sewers/water supplies. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Not regulated as hazardous goods.

Department of Transportation (DOT) Requirements

Bulk

Not regulated as hazardous goods.

Department of Transportation (DOT) Requirements

Not regulated as dangerous goods.

Canadian Transportation of Dangerous Goods (TDG) Requirements

Not regulated as hazardous goods.

Canadian Transportation of Dangerous Goods (TDG) Requirements

Not regulated as dangerous goods.

IMDG

Not regulated as hazardous goods.

IATA

Not regulated as hazardous goods.

IATA

Not regulated as dangerous goods.

15. Regulatory Information

Labelling

Contains

Ethylene Glycol



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US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

Ethylene Glycol 107-21-1 1.0 % de minimis concentration

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

Ethylene Glycol: 5000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

International regulations

Canada - WHMIS - Ingredient Disclosure List

Ethylene Glycol 107-21-1 1 %

State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. - Massachusetts - Right To Know List

Ethylene Glycol 107-21-1 Present

U.S. - Minnesota - Hazardous Substance List

Ethylene Glycol 107-21-1 Present (particulate and vapor)

U.S. - New Jersey - Right to Know Hazardous Substance List

Ethylene Glycol 107-21-1 sn 0878

U.S. - Pennsylvania - RTK (Right to Know) List

Ethylene Glycol 107-21-1 Environmental hazard

U.S. - Rhode Island - Hazardous Substance List

Ethylene Glycol 107-21-1 Toxic; Flammable

U.S. - Texas - Effects Screening Levels - Long Term

Ethylene Glycol 107-21-1 10 ppb ESL (46% Ethylene glycol); 26 µg/m3 ESL (46% Ethylene glycol)

U.S. - Texas - Effects Screening Levels - Short Term

Ethylene Glycol 107-21-1 100 ppb ESL (46% ethylene glycol); 260 µg/m3 ESL (46% ethylene glycol)



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16. Other Information

HMIS® ratings

Health: 2
Flammability: 2
Physical hazard: 0

NFPA ratings

Health: 2
Flammability: 2
Instability: 0

Prepared by

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Disclaimer

THIS PRODUCT'S HEALTH AND SAFETY INFORMATION IS PROVIDED TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH, SAFETY AND ENVIRONMENTAL REGULATIONS. THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE TO US, AND IS BELIEVED TO BE ACCURATE, ALTHOUGH NO GUARANTEE OR WARRANTY IS PROVIDED OR IMPLIED BY THE COMPANY IN THIS RESPECT. SINCE THE USE OF THIS PRODUCT IS WITHIN THE EXCLUSIVE CONTROL OF THE USER, IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE CONDITIONS OF SAFE USE. SUCH CONDITIONS MUST COMPLY WITH ALL GOVERNMENTAL REGULATIONS.

Issue date

June-04-2009

MSDS sections updated

This document has undergone significant changes and should be reviewed in its entirety.