



SAFETY DATA SHEET

Revision Date 13-February-2015

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name F-860 Acid Cleaner

UN/ID No UN2031
Product Code F-860

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Industrial Cleaner

Details of the Supplier of the Safety Data Sheet

Supplier Address

Delta Foremost Chemical Corporation
3915 Air Park St.
Memphis, Tennessee 38118

Emergency Telephone Number

Company Phone Number (901) 363-4340
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

Oxidizing liquids	Category 3
Skin Corrosion/Irritation	Category 1 Sub-category A
Serious Eye Damage/Eye Irritation	Category 1

Signal Word

DANGER

Hazard Statements

May intensify fire; oxidizer.
Causes severe skin burns and eye damage.
Causes serious eye damage.



Appearance Clear Liquid

Physical State Liquid

Odor Pungent, Acidic

Precautionary Statements - Prevention

Keep away from heat.
Keep/store away from clothing and combustible materials.
Take any precaution to avoid mixing with combustibles.
Use only outdoors or in a well-ventilated area.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No	Weight-%
Nitric Acid	7697-37-2	Proprietary

Product contains a proprietary mixture of ingredients.

4. FIRST AID MEASURES**First Aid Measures**

General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	Flush with plenty of water for at least 15 minutes. Continue rinsing during transport to hospital. See physician immediately.
Skin Contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Wash off with soap and plenty of water. Consult a physician.
Inhalation	Remove to fresh air. Give artificial respiration if not breathing. Seek immediate medical attention/advice.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most Important Symptoms and Effects, both Acute and Delayed

See section 2.2 and section 11

Symptoms	Burning and/or irritation to eyes and skin. Irritation and corrosive burns to mouth, throat, and stomach. May cause irritation to the mucous membranes and upper respiratory tract.
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Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Alcohol resistant foam, carbon dioxide or dry chemical extinguisher, or water.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Nitrogen oxides (NO_x).

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal Precautions, Protective Equipment and Emergency Procedures**

Personal Precautions Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For PPE see section 8.

Environmental Precautions Do not let product enter drains.

Methods and Material for Containment and Cleaning Up

Methods for Containment Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Methods for Cleaning Up Soak up with inert absorbent material. Reclaim spilled material into approved container for proper disposal. Remaining material may be neutralized. For waste disposal, see section 13 of the SDS. Neutralize with a lime or soda ash and flush area with large amounts of water.

7. HANDLING AND STORAGE**Precautions for Safe Handling**

Advice on Safe Handling Use personal protection recommended in Section 8. Wash face, hands, and any exposed skin thoroughly after handling. Do not breathe vapors or spray mist. Use only in well-ventilated areas. Do not eat, drink or smoke when using this product. Keep away from heat and sources of ignition. For precautions see section 2.2.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): Oxidizing materials.

Incompatible Materials Bases, Strong reducing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Nitric Acid	STEL: 4.000000 ppm TWA: 2.000000 ppm	TWA: 2.000000 ppm	TWA: 2.000000 ppm STEL: 4.000000ppm

Appropriate Engineering Controls

Engineering Controls Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Goggles or face shield.

Skin and Body Protection Full contact: Fluorinated rubber of at least 0.7mm thickness
 Splash contact: Natural latex or chloroprene of at least 0.6mm thickness.
 Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace.

Respiratory Protection Ensure adequate ventilation, especially in confined areas. If this is not guaranteed, wear a full face respirator with multi-purpose combination respirator cartridges as a back up. If the respirator is the sole means of protection, use a full-face supplied air respirator.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	Liquid	Odor	Pungent, Acidic
Appearance	Clear Liquid	Odor Threshold	Not determined
Color	Colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	<1.0	
Melting Point/Freezing Point	Not available	
Boiling Point/Boiling Range	120 °C / 248 °F	
Flash Point	Not available	
Evaporation Rate	Not available	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not available	
Lower Flammability Limit	Not available	
Vapor Pressure	49 hPa	
Vapor Density	Same as water	
Specific Gravity	1.150	(1=Water)
Water Solubility	Soluble in water	
Solubility in Other Solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions. Will react with incompatible materials.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Alkali metals, organic materials, acetic anhydride, acetonitrile, acrylonitrile, ammonia, crotonaldehyde, halogenated hydrocarbon, acids, bases, metals, hexalithium disilicide, hydrogen peroxide, ketones, metal acetylides, water, fluorine, amines, thiols, cadmium, bromine, copper, hydrazinium nitrate, nitro compounds, cyanides, phosphorous trihydride(phosphine), diphosphine, halides, organic halides, may set fire to wood or paper., polyethers, methhyl vinyl ether.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Eye Contact

Causes severe eye damage.

Skin Contact

Causes severe skin burns.

Inhalation

May cause irritation to the mucous membranes and upper respiratory tract.

Ingestion

Can cause irritation and corrosive burns to mouth, throat, and stomach.

Information on Physical, Chemical and Toxicological Effects

Symptoms

Material is extremely destructive to tissue of mucous membranes and upper respiratory tract, eyes, and skin. Inhalation may provoke the following symptoms: spasm, inflammation and edema of the bronchi, spasm, inflammation, and edema of the larynx, pneumonitis, pulmonary edema. Symptoms and signs of poisoning are: burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting, pulmonary edema. Effects may be delayed. Large doses may cause: conversion of hemoglobin to methemoglobin, producing cyanosis; marked fall in blood pressure, leading to collapse, coma, and possibly death.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Carcinogenicity

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical Measures of Toxicity

Not determined

12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available.

Persistence and Degradability

Not determined

Bioaccumulation

Not determined

Mobility

No Data Available

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations. Contact a licensed professional waste disposal service to dispose of this material. Offer surplus and non-recyclable material to a licensed disposal company.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations. Treat as unused product

Chemical Name	California Hazardous Waste Status
Nitric Acid 7697-37-2	Corrosive Toxic Reactive

14. TRANSPORT INFORMATION**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN 2031
Proper Shipping Name Nitric Acid
Hazard Class 8 (5.1)
Packing Group II

IATA

UN/ID No UN 2031
Proper Shipping Name Nitric Acid
Hazard Class 8 (5.1)
Packing Group II

IMDG

UN/ID No UN 2031
Proper Shipping Name Nitric Acid
Hazard Class 8 (5.1)
Packing Group II

15. REGULATORY INFORMATION

International Inventories

Not Determined

Legend:

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS - Japan Existing and New Chemical Substances**IECSC - China Inventory of Existing Chemical Substances**KECL - Korean Existing and Evaluated Chemical Substances**PICCS - Philippines Inventory of Chemicals and Chemical Substances*

US Federal Regulations

CERCLA

SARA 313

The following components are subject to reporting levels established by SARA Title III, Section 313:

Nitric Acid CAS 7697-37-2

CWA (Clean Water Act)

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Nitric Acid 7697-37-2	X	X	X

16. OTHER INFORMATION

NFPA

Health Hazards

Flammability

Instability

Special Hazards

3

0

2

OX

HMIS

Health Hazards

Flammability

Physical Hazards

Personal Protection

3

0

3

Not determined

Revision Date

2-July-2015

Revision Note

New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet