

Safety Data Sheet

Revision Date Jun-25-2015 Revision Number 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name Special NF Phosphorous Extraction Solution

Other means of identification

Product Code(s) 6362 UN-No 2922

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory chemicals. Industrial (not for food or food contact use). Use as a laboratory

reagent.

Details of the supplier of the safety data sheet

Manufacturer Address LaMotte Company, Inc. 802 Washington Avenue P.O. Box 329

Chestertown, MD 21620 USA

T 410-778-3100 F 410-778-9748

Emergency telephone number

24 Hour Emergency Number (CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A

EMERGENCY OVERVIEW

WARNING

Hazard statements

Causes skin irritation. Causes serious eye irritation.



Appearance Clear colorless

Physical state liquid

Odor None

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED, Drink 1 or 2 glasses of water, Call a physician immediately

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool.

Other Hazards

May be harmful if swallowed

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Hydrochloric acid	7647-01-0	1.4
Ammonium fluoride	12125-01-8	1.7
Water	7732-18-5	to 100%

4. FIRST AID MEASURES

First Aid Measures

General advice Do not get in eyes, on skin, or on clothing.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash off immediately with soap and plenty of water removing all contaminated clothes and

shoes. If skin irritation persists, call a physician.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen.

Ingestion Rinse mouth with water and afterwards drink plenty of water or milk. Consult a physician.

Never give anything by mouth to an unconscious person.

<u>Self-protection of the first aider</u> Use personal protective equipment. See section 8 for more information. Do not use

mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory

medical device.

Notes to Physician Treat symptomatically. For additional information, see Safety Data Sheet.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray, dry chemical, carbon dioxide (CO₂), or foam.

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 See section 8.

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for cleaning up

Use personal protective equipment. Use a non-combustible material like vermiculite, sand

or earth to soak up the product and place into a container for later disposal. After cleaning,

flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Prevent contact with

skin, eyes, and clothing. Do not taste or swallow. Do not eat, drink, or smoke when using

this product.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children.

Incompatible Products Alkalis. Metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrochloric acid 7647-01-0	Ceiling: 2 ppm	Ceiling 5 ppm (7mg/m³)	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m³
Ammonium fluoride 12125-01-8	TWA: 2.5 mg/m ³	TWA: 2.5 mg/m ³	TWA: 2.5 mg/m ³
Water 7732-18-5	-	-	Not Established

Appropriate engineering controls

Engineering Measures Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves/clothing.

Respiratory protection Maintain adequate ventilation.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Wash hands before

breaks and immediately after handling the product. Do not eat, drink or smoke when using

this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance Clear colorless Odor None

Property Values Remarks • Method

No information available

pH 2

Melting point / freezing pointNo information availableBoiling point / boiling range> 100 °C /> 212 °FFlash pointNo information available

Evaporation rate

Flammability (solid, gas)

Flammability Limit in Air

No information available

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor density
Specific gravity

No information available
No information available
No information available
No information available

Water solubility No information available No information available Solubility in other solvents **Partition coefficient** No information available **Autoignition temperature** No information available **Decomposition temperature** No information available Kinematic viscosity No information available No information available **Dynamic viscosity** No information available **Explosive properties** No information available **Oxidizing properties**

Other Information

Softening point
Molecular weight
VOC Content (%)
Density
No information available

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions of use and storage.

Hazardous Reactions None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid None known.
Incompatible materials Alkalis. Metals.

Hazardous decomposition products Hydrogen chloride. Hydrogen fluoride.

11. TOXICOLOGICAL INFORMATION

Product Information Harmful if swallowed

Information on likely routes of exposure

Component Information

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Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric acid 7647-01-0	238 - 277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat)1 h
Ammonium fluoride 12125-01-8	Not Established	Not Established	Not Established
Water 7732-18-5	> 90 mL/kg (Rat)	Not Established	Not Established

Information on toxicological effects

Irritation May cause skin and eye irritation.

Chemical name	ACGIH	IARC	NTP	OSHA
Hydrochloric acid 7647-01-0	Not Established	Group 3	Not Established	Not Established

Ammonium fluoride 12125-01-8	Not Established	Group 3	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	Not Established	Not Established

ATEmix (oral) 4370

ATEmix (dermal) 16818 mg/kg ATEmix (inhalation-dust/mist) 16.2 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Hydrochloric acid	Not Established	282: 96 h Gambusia affinis mg/L	Not Established
7647-01-0		LC50 static	
Ammonium fluoride	Not Established	364.0: 96 h Pimephales promelas	Not Established
12125-01-8		mg/L LC50 static	
Water	Not Established	Not Established	Not Established
7732-18-5			

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Hydrochloric acid 7647-01-0	Not Established
Ammonium fluoride 12125-01-8	Not Established
Water 7732-18-5	Not Established

13. DISPOSAL CONSIDERATIONS

Disposal Methods

This material, as supplied, is not a hazardous waste according to state and Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste pursuant to Federal regulations, and the applicable state requirements for the specific area of disposal. Consult the appropriate state, regional, or local regulations for additional requirements. When in compliance with local regulations, neutralize reagent to pH 7 with dilute base (NaOH/soda ash/slaked lime), then rinse to drain with excess water.

Contaminated packaging

Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Hydrochloric acid 7647-01-0	Not Established	-	Not Established	Not Established
Ammonium fluoride 12125-01-8	Not Established	-	Not Established	Not Established
Water 7732-18-5	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Hydrochloric acid 7647-01-0	Not Established	Not Established	Not Established	Not Established
Ammonium fluoride 12125-01-8	Not Established	Not Established	Not Established	Not Established
Water	Not Established	Not Established	Not Established	Not Established

7732-18-5

California Hazardous Waste Status
-
-
-

14. TRANSPORT INFORMATION

DOT

Proper shipping name CORROSIVE LIQUID, TOXIC, N.O.S- (HYDROCHLORIC ACID, AMMONIUM FLUORIDE)

UN-No 2922
Hazard Class 8
Subsidiary class 6.1
Packing group III

<u>IATA</u>

Proper shipping name CORROSIVE LIQUID, TOXIC, N.O.S- (HYDROCHLORIC ACID, AMMONIUM FLUORIDE)

UN-No 2922
Hazard Class 8
Subsidiary class 6.1
Packing group III

IMDG/IMO

Proper shipping name CORROSIVE LIQUID, TOXIC, N.O.S- (HYDROCHLORIC ACID, AMMONIUM FLUORIDE)

UN-No 2922
Hazard Class 8
Subsidiary class 6.1
Packing group III

15. REGULATORY INFORMATION

International Inventories

TSCA Complies Complies **DSL/NDSL** Complies **EINECS/ELINCS** Complies **ENCS IECSC** Complies **KECL** Complies **PICCS** Complies **AICS** Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - 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

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Hydrochloric acid 7647-01-0	1.0
Ammonium fluoride 12125-01-8	1.0
Water 7732-18-5	Not Established

SARA 311/312 Hazard Categories

Acute health hazard

Chronic Health Hazard

No
Fire hazard

Sudden release of pressure hazard

No
Reactive Hazard

No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Hydrochloric acid 7647-01-0	5000 lb	Not Established	Not Established	Х
Ammonium fluoride 12125-01-8	100 lb	Not Established	Not Established	Х
Water 7732-18-5	Not Established	Not Established	Not Established	Not Established

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Hydrochloric acid 7647-01-0	5000 lb	5000 lb	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ammonium fluoride 12125-01-8	100 lb	Not Established	RQ 100 lb final RQ RQ 45.4 kg final RQ
Water 7732-18-5	-	Not Established	-

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

Chemical name	California Proposition 65
Hydrochloric acid 7647-01-0	Not Established
Ammonium fluoride 12125-01-8	Not Established
Water 7732-18-5	Not Established

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Hydrochloric acid 7647-01-0	X	X	X
Ammonium fluoride 12125-01-8	X	X	Х
Water 7732-18-5	Not Established	Not Established	Х

CPSC (Consumer Product Safety Commission) - Specially Regulated Substances

Chemical name	CPSC (Consumer Product Safety Commission) - Specially Regulated Substances		
Hydrochloric acid 7647-01-0	Add POISON to label, 16 CFR 1500.129 (>=10%, free or chemically unneutralized)		
16. OTHER INFORMATION			



Prepared by **Issuing Date Revision Date** Reason for revision Regulatory Affairs Department

Jun-25-2015 Jun-25-2015

New US GHS format

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Material Safety Data Sheet