

SAFETY DATA SHEET

Issue Date 08-Oct-2014 Revision Date 01-Sept-2020 Version 4

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

Product Name MICROLOX SPECIAL 70 LF

Other means of identification

Product Code 182 UN/ID No. UN3264 Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Acid Cleaner.

Uses advised against PREVENT DISPERSION OF MISTS!

Manufacturer Address

Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN 55355 (320-693-2477)

Emergency telephone number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

Label elements

Emergency Overview

Danger

Hazard statements

Causes severe skin burns and eye damage May be corrosive to metals Harmful if inhaled



Appearance aqueous solution

Physical state liquid

Odor None

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling Keep only in original container Wear protective gloves/protective clothing/eye protection/face protection Use only in well-ventilated areas

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see Section 4 on this label)

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

Absorb spillage to prevent material damage

Precautionary Statements - Storage

Store locked up

Store in a corrosive resistant container.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other Information

- Harmful to aquatic life with long lasting effects
- · Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Nitric acid	7697-37-2	35	
Phosphoric acid	7664-38-2	4	

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

Eye contact Flush immediately with water for 15 minutes. Lift upper and lower eyelids for complete

rinsing. Get immediate medical attention.

Skin Contact Flush with water for 15 minutes. Get medical attention. Remove contaminated clothing and

wash before reuse.

Inhalation Remove victim from immediate source of exposure to fresh air. If breathing is difficult,

administer oxygen if available. If victim is not breathing, administer CPR. If individual experiences nausea, headache, or dizziness, get immediate medical attention.

Ingestion Rinse mouth with water. Give water to dilute. Do not induce vomiting. Get immediate

medical attention. Never give anything by mouth to a semi-comatose, comatose, convulsing

or unconscious person.

Most important symptoms and effects, both acute and delayed

Symptoms Corrosive. Causes tissue destruction, permanent damage to the cornea, blindness.

Causes irritation (possibly severe), burns to the skin. Mists may cause lung irritation, shortness of breath, fluid in lungs. Ingestion causes nausea, vomiting, diarrhea, corrosion, burns to mouth and esophagus, abdominal pain, chest pain, shortness of breath, seizures,

death.

Indication of any immediate medical attention and special treatment needed

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical

If the stock solution container breaks, the solution should be handled with care as it is corrosive. May produce poisonous or irritating gas or fumes. This material is reactive with many materials.

Explosion data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

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. Use water spray to cool fire exposed containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate nonessential personnel. Ventilate area. Wear appropriate personal protection

equipment. Remove all sources of ignition.

Environmental precautions See Section 12 for additional ecological information.

Methods for containment Stop leak if you can do it without risk. Completely contain spilled material with dikes or sand

bags, etc.

Methods for cleaning up Recover as much material as possible into containers for disposal or reuse. Remaining

material may be diluted with water and neutralized. Flush spill area with water. Neutralization products, both solid and liquid, must be recovered for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Do not get in eyes, on skin, or clothing. Do not breathe vapors or mists. Do not ingest.

Wash thoroughly after handling. Wear protective clothing/equipment. Use with adequate

ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions . Keep containers tightly closed and properly labeled. This product reacts violently with

bases liberating heat and causes spattering. Store in a cool, dry, well-ventilated area. Wash hands before eating, drinking, using tobacco, applying make-up or using the toilet. Do not store, use, and/or consume foods, beverages, tobacco in areas where this product is

stored.

Incompatible materials Fluorine, strong oxidizing and reducing agents, bases, metals, sulfur tiroxide, and

phosphorus petoxide. Reacts explosively with metallic powders, hydrogen sulfide, carbides, chlorates, fulminates, nitrates, picrates., cyanides, sulfides, and turpentine. Increases the

the flammability of combustible, organic and readily oxidizable materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines .

Chemical Name ACGIH TLV OSHA PEL NIOSH IDLH

Nitric acid	STEL: 4 ppm	TWA: 2 ppm	IDLH: 25 ppm
7697-37-2	TWA: 2 ppm	TWA: 5 mg/m ³	TWA: 2 ppm
		(vacated) TWA: 2 ppm	TWA: 5 mg/m ³
		(vacated) TWA: 5 mg/m ³	STEL: 4 ppm
		(vacated) STEL: 4 ppm	STEL: 10 mg/m ³
		(vacated) STEL: 10 mg/m ³	-
Phosphoric acid	STEL: 3 mg/m ³	TWA: 1 mg/m ³	IDLH: 1000 mg/m ³
7664-38-2	TWA: 1 mg/m ³	(vacated) TWA: 1 mg/m ³	TWA: 1 mg/m³
		(vacated) STEL: 3 mg/m ³	STEL: 3 mg/m ³

Appropriate engineering controls

Showers Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Wear protective splash proof safety goggles. Additional full face protection is recommended Eye/face protection

if splashing is a possibility.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved Respiratory protection

> respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

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 liauid

Appearance aqueous solution Odor None

Color clear colorless Odor threshold No information available

Property Values Remarks • Method

1% Solution 1.7

No information available

No information available Melting point/freezing point No information available Boiling point / boiling range Flash point No information available **Evaporation rate** No information available

Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit: No information available Lower flammability limit: No information available Vapor pressure No information available Vapor density No information available

Specific Gravity 1.258

Oxidizing properties

Water solubility Soluble in water

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

Other Information

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

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

High temperatures might lead to formation of nitrogen dioxide. Contact with water may cause violent reaction with evolution of heat. To dilute: Add product slowly to lukewarm water; not water to product.

Incompatible materials

Fluorine, strong oxidizing and reducing agents, bases, metals, sulfur tiroxide, and phosphorus petoxide. Reacts explosively with metallic powders, hydrogen sulfide, carbides, chlorates, fulminates, nitrates, picrates., cyanides, sulfides, and turpentine. Increases the the flammability of combustible, organic and readily oxidizable materials.

Hazardous Decomposition Products

At flame temperatures, toxic phosphoric oxide fumes may be emitted. Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information No data available

Inhalation May cause irritation of respiratory tract.

Eye contact Risk of serious damage to eyes.

Skin Contact Contact causes severe skin irritation and possible burns.

Ingestion Harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Nitric acid 7697-37-2	-	-	= 67 ppm (Rat) 4 h
Phosphoric acid 7664-38-2	= 1530 mg/kg (Rat)	= 2730 mg/kg (Rabbit)	> 850 mg/m³ (Rat) 1 h

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

SensitizationNo information available.Germ cell mutagenicityNo information available.CarcinogenicityNo information available.

Chemical Name	ACGIH	IARC	NTP	OSHA

182 MICROLOX SPECIAL 70 LF

Nitric acid	-	Group 2A	-	Х
7697-37-2		·		

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
Aspiration hazard
No information available.
No information available.
No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 38250 mg/kg
ATEmix (dermal) 68250 mg/kg
ATEmix (inhalation-dust/mist) 5.3 mg/l
ATEmix (inhalation-vapor) 191 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Nitric acid 7697-37-2	-	72: 96 h Gambusia affinis mg/L LC50	-
Phosphoric acid 7664-38-2	-	3 - 3.5: 96 h Gambusia affinis mg/L LC50	4.6: 12 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Nitric acid	-2.3
7697-37-2	

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

Chemical Name	California Hazardous Waste Status
Nitric acid 7697-37-2	Toxic Corrosive Ignitable
Phosphoric acid 7664-38-2	Corrosive

14. TRANSPORT INFORMATION

DOT Regulated UN3264

Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.

Hazardous ingredients (nitric acid/phosphoric acid)

Hazard Class 8
Packing Group | |

15. REGULATORY INFORMATION

International Inventories

Complies **TSCA DSL/NDSL** Complies **EINECS/ELINCS** Complies **ENCS** Does not comply **IECSC** Complies Complies **KECL 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 - Percent by Weight	
Nitric acid - 7697-37-2	35.0%	

SARA 311/312 Hazards

Corrosive to metal

Acute toxicity (any route of exposure)

Serious eye damage or eye irritation

Skin corrosion or irritation

CWA (Clean Water Act)

This product does not contain any substances regulated as 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
Nitric acid 7697-37-2	1000 lb	-	-	Х
Phosphoric acid 7664-38-2	5000 lb	-	-	Х

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Nitric acid	1000 lb	1000 lb	RQ 1000 lb final RQ
7697-37-2			RQ 454 kg final RQ
Phosphoric acid	5000 lb	-	RQ 5000 lb final RQ
7664-38-2			RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Nitric acid 7697-37-2	X	X	Х
Phosphoric acid 7664-38-2	Х	Х	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

NFPA Health hazards 3 Flammability 0 Instability 1 Physical and Chemical

Properties -

Health hazards 3 Flammability 0 Physical hazards 1 Personal protection X

Prepared By Imt

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Revision Note Updated Section 15

Disclaimer

The information provided in this Material 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