

SAFETY DATA SHEET

Issuing Date 25-Feb-2019 Revision Date 25-Feb-2019 Revision Number 2

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

Product Identifier

Product Name MSZN-10PPM

Other means of identification

Product Description 10 ug/mL Zinc

Recommended use of the chemical and restrictions on use
Recommended Use

Laboratory chemicals.

Uses advised against No information available

<u>Details of the supplier of the safety data sheet</u>

Company

Inorganic Ventures 300 Technology Drive Christiansburg, VA 24073

web: www.inorganicventures.com

E-mail Address: info@inoragnicventures.com

Emergency Telephone Number

Chemtrec 1-800-424-9300 (North America) Chemtrec +1 703-741-5970 (International)

2. HAZARDS IDENTIFICATION

GHS

Classification

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

Label Elements

Warning

Hazard statements

Causes skin irritation Causes serious eye irritation



Appearance clear / colorless

Physical state Liquid

Odor Odorless

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Eves

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

Skin

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

Hazards not otherwise classified (HNOC)

· Harmful to aquatic life with long lasting effects

Other Information

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Nitric acid	7697-37-2	2

4. FIRST AID MEASURES

First aid measures

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

Consult a physician.

Skin Contact Wash skin with soap and water.

Inhalation Remove to fresh air.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and

No information available.

Effects

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

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

Unsuitable Extinguishing Media Decomposition by contact with water may generate vapors which can be ignited by heat or open flame.

Special Exposure Hazards Arising from the Substance/Mixture

Thermal decomposition can lead to release of irritating gases and vapors

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure adequate ventilation.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. See Section 12 for additional Ecological

Information.

Methods and material for containment and cleaning up

Methods for Cleaning up Dam up. Neutralise with lime; soda. Soak up with inert absorbent material. Sweep up and

shovel into suitable containers for disposal. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Nitric acid	4 ppm STEL	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	

Appropriate engineering controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Respiratory Protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators

Hygiene Measures 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

Appearance clear / colorless
Odor Odorless

Property Values

pH VALUENo data availableMelting Point/RangeNo data availableBoiling Point/Range100 °CEvaporation rateNo data available

Flammability (solid, gas)

Vapor Pressure

Vapor density

Relative Density

No data available

Water Solubility Miscible

Partition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableViscosityNo data available

Explosive PropertiesNo information available **Oxidizing Properties**No information available

Other information

VOC Content 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.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

None known.

Incompatible Materials

Reducing agent

Hazardous Decomposition Products

Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Product does not present an acute toxicity hazard based on known information

Inhalation No data available.

Eye Contact No data available.

Skin Contact No data available.

Ingestion No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Nitric acid - 7697-37-2	=	-	$= 67 \text{ ppm} (Rat) 4 h = 130 \text{ mg/m}^3 ($
			Rat)4h

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.Mutagenic EffectsNo information available.

Carcinogenic effects

Chemical Name	ACGIH	IARC	NTP	OSHA
Nitric acid				X
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 (inhalation-dust/mist) 1090 mg/l ATEmix (inhalation-vapor) 3350 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects

Contains 0 % of components with unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Nitric acid 7697-37-2		72: 96 h Gambusia affinis mg/L LC50		

Persistence and Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

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

Other Adverse Effects

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues/Unused Dispose of in accordance with federal, state and local regulations

Products

Contaminated Packaging Do not reuse empty containers.

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

14. TRANSPORT INFORMATION	

IMDG

14.1. UN-No UN3264

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

14.3. Hazard Class 14.4. Packing Group

Description Not applicable

14.5. Marine Pollutant None 14.6. Special Provisions None

No information available 14.7. Transport in bulk according

to Annex II of MARPOL 73/78 and

the IBC Code

RID

14.1. UN-No UN3264

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

14.3. Hazard Class 14.4. Packing Group Ш

Not applicable Description

14.5. Environmental hazard None 14.6. Special Provisions None

<u>ADR</u>

14.1. UN-No

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

14.3. Hazard Class 14.4. Packing Group Ш

Not applicable Description

14.5. Environmental hazard None 14.6. Special Provisions None

ICAO

14.1. UN-No UN3264

14.2. Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s

14.3. Hazard Class 14.4. Packing Group

Description Not applicable

14.5. Environmental hazard None 14.6. Special Provisions None

IATA-DGR

14.1. UN-No UN3264

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

14.3. Hazard Class 14.4. Packing Group Ш

Description Not applicable

14.5. Environmental hazard None None 14.6. Special Provisions

15. REGULATORY INFORMATION

International Inventories

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

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 Commercial Chemical Substances/EU 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

U.S. 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	CAS No	Weight-%	SARA 313 - Threshold Values %
Nitric acid - 7697-37-2	7697-37-2	2	1.0

SARA 311/312 Hazard Categories

Acute health hazard
Chronic Health Hazard
Fire hazard
Sudden Release of Pressure Hazard
Not classified
Not classified
Not classified
Not classified

Reactive Hazard Not classified

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
Nitric acid	1000 lb			X
7697-37-2				

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	Extremely Hazardous Substances RQs	RQ
Nitric acid 7697-37-2	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

U.S. 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	X	X	X
7697-37-2			

U.S. EPA Label Information

16. OTHER INFORMATION

Revision Date 25-Feb-2019 Revision Note

No information available

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 SDS