

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

Product Name NITRIC ACID 38 Deg Be

Other means of identification

Product Code 291
UN/ID No. UN2031
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

| | |
|-----------------------------------|---------------------------|
| Skin corrosion/irritation | Category 1 Sub-category A |
| Serious eye damage/eye irritation | Category 1 |
| Corrosive to metals | Category 1 |
| Oxidizing liquids | Category 3 |

Label elements

Emergency Overview

Danger

Hazard statements

Causes severe skin burns and eye damage
 May be corrosive to metals
 May intensify fire; oxidizer



Appearance No information available

Physical state liquid

Odor Pungent

Precautionary Statements - Prevention

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
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep only in original container
 Take any precaution to avoid mixing with combustibles.
 Keep/Store away from clothing/combustible materials

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

In case of fire: Use CO₂, dry chemical, or foam for extinction

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

| Chemical Name | CAS No. | Weight-% | Trade Secret |
|---------------|-----------|----------|--------------|
| Nitric acid | 7697-37-2 | 57.8 | |

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

4. FIRST AID MEASURES

First aid measures**General advice**

Immediate medical attention is required.

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.

Self-protection of the first aider

Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed**Symptoms**

Causes severe irritation and or burns.

Indication of any immediate medical attention and special treatment needed

Note to physicians Effects of contact or inhalation may be delayed.

5. FIRE-FIGHTING MEASURES**Suitable extinguishing media**

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

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

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. Wear chemical resistant suit, gloves and boots rated for use with corrosive materials. Wear appropriate respiratory protection based on spill conditions, airborne concentration and the presence or absence of fumes or mists. |
| Environmental precautions | See Section 12 for additional ecological information. |
| Methods for containment | 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. Containers that have been emptied will retain product residue and should be handled as if they were full. Store in a cool, dry, well-ventilated place away from incompatible materials. 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 | Extremely reactive or incompatible with alkalis. Highly reactive with reducing agents, combustible materials, metals. Slightly reactive with organic materials, acids, moisture. Will release flammable and potentially explosive hydrogen gas on contact with some metals. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--------------------------|---------------------------|---|---|
| Nitric acid 7697-37-2 | STEL: 4 ppm TWA: 2 ppm | TWA: 2 ppm TWA: 5 mg/m ³ (vacated) TWA: 2 ppm (vacated) TWA: 5 mg/m ³ (vacated) STEL: 4 ppm (vacated) STEL: 10 mg/m ³ | IDLH: 25 ppm TWA: 2 ppm TWA: 5 mg/m ³ STEL: 4 ppm STEL: 10 mg/m ³ |

Appropriate engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------|---|
| Eye/face protection | No special technical protective measures are necessary. |
| Skin and body protection | No special technical protective measures are necessary. |
| Respiratory protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved 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 Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|-------------------------------|--------------------------|-------------------------|--------------------------|
| Physical state | liquid | Odor | Pungent |
| Appearance | No information available | Odor threshold | No information available |
| Color | clear colorless | | |
| Property | Values | Remarks • Method | |
| pH | <1 | | |
| Melting point/freezing point | No information available | | |
| Boiling point / boiling range | 120 °C | | |
| Flash point | Not applicable | | |
| 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 | 1.352-1.358 | | |
| Water solubility | Soluble in water | | |
| Solubility in other solvents | No information available | | |
| Partition coefficient | No information available | | |
| 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 | | |
| Oxidizing properties | No information available | | |

Other Information

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

Extremely reactive or incompatible with alkalis. Highly reactive with reducing agents, combustible materials, metals. Slightly reactive with organic materials, acids, moisture. Will release flammable and potentially explosive hydrogen gas on contact with some metals.

Hazardous Decomposition ProductsNitrogen oxides (NO_x).**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

| | |
|----------------------------|--------------------|
| Product Information | No data available |
| 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 ppm (Rat) 4 h |

Information on toxicological effects**Symptoms** No information available.**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity No information available.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|--------------------------|-------|----------|-----|------|
| Nitric acid 7697-37-2 | - | Group 2A | - | X |

Reproductive toxicity No information available.

STOT - single exposure No information available.
 STOT - repeated exposure No information available.
 Aspiration hazard 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-vapor) 116 mg/l

12. ECOLOGICAL INFORMATION**Ecotoxicity**

0% of the mixture consists of component(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 | - |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

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

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 |

14. TRANSPORT INFORMATION**DOT**

UN/ID No. Regulated
 UN2031
 Proper shipping name Nitric Acid
 Hazard Class 8
 Packing Group II

15. REGULATORY INFORMATION

International Inventories

| | |
|----------------------|-----------------|
| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Does not comply |
| 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 % |
|-------------------------|-------------------------------|
| Nitric acid - 7697-37-2 | 1.0 |

SARA 311/312 Hazard Categories

| | |
|--|-----|
| Acute health hazard | Yes |
| Chronic Health Hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

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 | - | - | X |

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 7697-37-2 | 1000 lb | 1000 lb | RQ 1000 lb final RQ RQ 454 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 | X |
|--------------------------|---|---|---|

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

| | | | | |
|-------------|------------------|----------------|--------------------|------------------------------------|
| NFPA | Health hazards 3 | Flammability 0 | Instability 0 | Physical and Chemical Properties - |
| HMIS | Health hazards 3 | Flammability 0 | Physical hazards 0 | Personal protection X |

Prepared By Imt
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Revision Note

No information available

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