



MATERIAL SAFETY DATA SHEET

Product:**033442** **2.0 M Nitric Acid (1 L)****33443** **6-pack of 2.0 M Nitric Acid (1 L)**

DIONEX Corporation
 1228 Titan Way
 P.O. Box 3603
 Sunnyvale, California 94088-3603

Emergency Phone: 1-800-424-9300 (CHEMTREC)
 Information Phone: (408) 737-0700
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The following information is believed to be accurate and is currently the best information available to us. However, we make no warranties, express or implied, with respect to the information supplied and we assume no liability resulting from its use.

2. HAZARDOUS IDENTIFICATION

| HAZARD CLASS | Corrosive - Acid | NFPA | HMIS |
|--------------------|-------------------------|---------------------|-----------|
| Eyes: | Corrosive | HEALTH | 3 3 |
| Skin: | Corrosive | FLAMMABILITY | 0 0 |
| Ingestion: | Corrosive | REACTIVITY | 0 0 |
| Inhalation: | Corrosive | NFPA SPECIAL | OX - |
| | | HMIS PPE | |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| HAZARDOUS COMPONENTS | Water | Nitric Acid | | | | |
|----------------------|-----------|--------------------------|---|---|---|---|
| PERCENT (%) | 87.4 | 12.6 | 0 | 0 | 0 | 0 |
| CAS NO. | 7732-18-5 | 7697-37-2 | | | | |
| EINECS NO. | 231-791-2 | 231-714-2 | | | | |
| RISKS | | R22, R23, R35 | | | | |
| SAFETY | | S23, S26, S36/37/39, S45 | | | | |



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4. FIRST AID MEASURES

- GENERAL:** Remove contaminated clothing, wash thoroughly before reuse.
- EYES:** Flush with water for at least 15 minutes occasionally raising upper and lower eyelids.
- SKIN:** Remove contaminated clothing and flush with water thoroughly
- INHALATION:** Move to fresh air
- INGESTION:** If large amounts are swallowed, get medical help immediately. If patient is conscious, give large quantities of water

5. FIRE FIGHTING MEASURES

- UNUSUAL FIRE AND EXPLOSION:** None
- HAZARDS:** Corrosive, Oxidizer
- EXTINGUISHING MEDIA:** Carbon Dioxide, Foam, Dry Chemical
(Note: Carbon Dioxide is one of the decomposition products)
- SPECIAL FIRE FIGHTING PROCEDURES:** Although the product is not combustible, firefighters subject to products of combustion should wear full-protective clothing including self-contained breathing apparatus

6. ACCIDENTAL RELEASE MEASURES

- Ventilate area.
Wear appropriate protective clothing and eye protection.
Contain spill.
Collect or absorb with an inert material (vermiculite, dry sand, earth, etc.)
Mop up and store in a suitable waste container.
Wash contaminated areas with soap and water.

7. HANDLING AND STORAGE

- Ensure good ventilation.
Have an eye wash in the immediate area in case of emergency.
Store at room temperature
Keep container tightly closed
Use good laboratory practice when working with any chemical whether it is considered hazardous or not.



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8. EXPOSURE CONTROL/PERSONAL PROTECTION

ROUTES OF ENTRY

INHALATION: Yes

SKIN: Yes

INGESTION: Yes

HEALTH HAZARDS

ACUTE: May cause irritation of eyes and mucous membranes

CHRONIC: Unknown

VENTILATION

LOCAL EXHAUST: Good laboratory ventilation is acceptable.

MECHANICAL (GENERAL): Use in hoods if possible

SPECIAL: None

OTHER: None

PROTECTIVE CLOTHING OR EQUIPMENT

GLOVES: Disposable laboratory gloves are adequate

EYE PROTECTION: Glasses or goggles.

RESPIRATORY: None

OTHER: Lab coats

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear to yellowish

ODOR: Vapors irritating to lungs and mucous membranes

pH: < 1

MOLECULAR WEIGHT: 63.02 (Nitric Acid)

MELTING POINT: Not Applicable

BOILING POINT: Approximately 100 degrees C

AUTOIGNITION TEMPERATURE: Not Applicable

FLASH POINT: Not Applicable

LOWER EXPLOSION LIMIT: Not Applicable

UPPER EXPLOSION LIMIT: Not Applicable

SPECIFIC GRAVITY: Approximately 1.05



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10. STABILITY & REACTIVITY

STABILITY/CONDITIONS TO AVOID: Nitric acid is a strong oxidizing agent. Chemical reactions with reducing agents is a source of additional heat.

INCOMPATIBILITY (MATERIALS TO AVOID): Reducing agents, bases

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: It emits highly toxic fumes of NOX and hydrogen nitrate.

HAZARDOUS POLYMERIZATION: Will not occur

11. TOXICOLOGY INFORMATION

PRODUCT TOXICOLOGY INFORMATION:

SYMPTOMS AND SIGNS OF EXPOSURE: May cause minor soreness or redness of eyes or mucous membranes.

SIGNS OF EXPOSURE:

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Unknown

EMERGENCY AND FIRST AID PROCEDURES: In case of contact, wash skin with copious amounts of water.
Flush eyes with copious amounts of water for at least 15 minutes.
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Submit to medical examination.

CARCINOGENICITY: No data found

RTECS #: No data found

ACGIH TLV TWA: No data found

OSHA PEL: No data found

NTP: No data found

IARC Monographs: No data found

HAZARDOUS COMPONENT TOXICOLOGY INFORMATION:

| Hazardous Components: | Water | Nitric Acid |
|-----------------------|-----------|----------------------------------------------------------|
| RTECS # | ZC0110000 | QU5775000 |
| OSHA PEL | Not Found | 2 PPM |
| ACGIH TLV | Not Found | 2 PPM/4 STEL; 9596 |
| TOXICITY DATA | None | ORL-HMN LDLo: 430 MG/KG UNK-MAN LDLo: 110 MG/KG |



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12. ECOLOGICAL INFORMATION

No information is found on environmental toxicity for this solution

13. DISPOSAL CONSIDERATIONS

Contact local hazardous materials or chemical waste disposal agency for regulations.

14. TRANSPORT INFORMATION

IATA CLASSIFICATION: IATA Dangerous Goods

UN ID NUMBER: 2031
PROPER SHIPPING NAME: Nitric acid
CLASS OR DIVISION: 8
SUB RISK: -
HAZARD LABEL(S): Corrosive
PACKAGING GROUP: II
LIMITED QUANTITY PKG INSTRUCTION: Y807
MAXIMUM LIMITED QUANTITY: 0.5 L
SPECIAL PROVISIONS: 0
ERG CODE: 8L

15. REGULATORY INFORMATION

PRODUCT RISK STATEMENTS: R8 Contact with combustible material may cause fire
R35 Causes severe burns

PRODUCT SAFETY STATEMENTS: S23 Do not breathe gas/fumes/vapor/spray (appropriate wording to be specified by the manufacturer)
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S36 Wear suitable protective clothing
S45 In case of accident or if you feel unwell, seek medical advice immediately

16. OTHER INFORMATION