MATERIAL SAFETY DATA SHEET

PRODUCT
903 and 7603 Nitric Acid

ODV INCORPORATED
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SECTION 1 – IDENTIFY

Name
ODV, Inc.

Address
P.O. Box 180, 9 Swallow Road, S. Paris, ME 04281

Telephone Number
207-743-7712

For Additional Information Contact:
Larry Dow

Date Prepared
May 1, 1993

Common name (used on Label)
903 or 7603 Nitric Acid

Trade name & Synonyms
NarcoPouch® & Narcotest®

Chemical Family
Does Not Apply

Chemical Name

Does Not Apply

Formula
HNO₃

SECTION 2 – HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENT
Nitric Acid

CAS #
7697-37-2

% (wt)
68

TLV
5 mg/m³/10 hr.

PEL
5 mg/m³

PEL: Permissible Exposure Limit established by the Occupational Safety and Health Administration
TLV: Threshold Limit Value established by the American Conference of Governmental Industrial Hygienists, 1987-88.

SECTION 3 – PHYSICAL DATA

BOILING POINT
less than 122°C

SPECIFIC GRAVITY (H₂O = 1)
1.42

VAPOR PRESSURE (mm Hg)
Less than 3.0 @ 20°C

PERCENT VOLATILE BY VOLUME
100%

VAPOR DENSITY (AIR = 1)
Approximately 2-3

EVAPORATION RATE
not determined

SOLUBILITY IN WATER
Complete

REACTIVITY IN WATER
Reacts violently when water is added with evolution of heat.

APPEARANCE AND ODOR
Clear liquid and colorless with acrid odor

SECTION 4 – FIRE AND EXPLOSION DATA

FLASH POINT
not determined

FLAMMABLE LIMITS IN AIR (% By Volume)
LOWER: not determined
UPPER: not determined

EXTINGUISHING MEDIA
water spray

AUTO IGNITION TEMPERATURE
not determined

UNUSUAL FIRE AND EXPLOSION HAZARDS
Wood and other organics may ignite spontaneously or have greatly increased flammability. Can cause explosion with hydrogen sulfide, metallic powders, carbides and turpentine.

SPECIAL FIRE FIGHTING PROCEDURES
Use proper respiratory protection against fumes such as self-contained breathing apparatus. Avoid inhalation of poisonous gaseous oxides of nitrogen.
**SECTION 5 - HEALTH INFORMATION**

**PRIMARY ROUTES OF EXPOSURE** Inhalation, contact with eyes or skin.

**SIGNS AND SYMPTOMS OF EXPOSURE**

1. **(1) ACUTE OVEREXPOSURE** - Irritation of eyes, nose and throat. Splashes in the eyes or on the skin will cause severe skin burns.
   
   Inhalation of vapor or oxides of nitrogen is injurious to lungs. Symptoms may be delayed.

2. **(2) CHRONIC OVEREXPOSURE** - Repeated or prolonged exposure to dilute solutions of nitric acid may cause irritation of the skin.
   
   Repeated or prolonged exposure to mists or vapors of nitric acid may cause erosion of teeth, chronic irritation of the eyes, or chronic inflammation of the nose, throat, and bronchial tubes.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE**

Impaired pulmonary function, pre-existing eye problems, pre-existing skin disorders may be aggravated by exposure.

**CHEMICAL/COMPONENT LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN**

<table>
<thead>
<tr>
<th>NTP</th>
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<th>No</th>
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<tr>
<td>IARC</td>
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<td>OSHA</td>
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**OTHER EXPOSURE LIMITS**

None.

**EMERGENCY & FIRST AID PROCEDURES**

In the case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician. If swallowed, do not give emetics. If conscious, give tap water, milk, or milk of magnesia. Call a physician.

**SECTION 6 - REACTIVITY DATA**

**STABILITY** Unstable ☐ Stable ☒

**CONDITIONS TO AVOID** Avoid adding water to the acid, large amounts of heat is produced. Elevated temperatures may cause liberation of toxic oxides of nitrogen.

**INCOMPATIBILITY (MATERIALS TO AVOID)**

Avoid contact of acid with combustible or readily oxidizable organic materials (such as wood, turpentine, metal powders, hydrogen sulfide, etc.) may cause fires and explosions. Contact of acid with strong bases may cause violent spattering.

**HAZARDOUS DECOMPOSITION PRODUCTS**

Toxic gases and vapors (such as oxides of nitrogen) may be released when nitric acid decomposes.

**HAZARDOUS POLYMERIZATION**

May occur ☐ Will not occur ☒

**CONDITIONS TO AVOID** Not applicable to polymerization.

**SECTION 7 - SPILL OR LEAK PROCEDURES**

**STEPS TO BE TAKEN IN CASE MATERIAL IS LEAKED OR SPILLED**

Avoid adding water directly to the acid, large amounts of heat is produced. Wear protective equipment, ventilate area; cover the contaminated surface with sodium bicarbonate, soda ash, or slaked lime. Flush spill with plenty of water.

**WASTE DISPOSAL METHOD**

Dispose of wastes in accordance with Federal, State and Local codes. Normal disposal includes neutralization (soda ash) and absorption in vermiculite, dry sand, earth, or similar material.

**SECTION 8 - PERSONAL PROTECTION INFORMATION**

**RESPIRATORY PROTECTION** Respiratory protection is not required under normal and intended uses. Self-contained breathing apparatus required during fire fighting and spill clean-up.

**VENTILATION** Room ventilation is expected to be adequate except during spills or fires.

**PROTECTIVE GLOVES** Required when contact with nitric acid exists.

**EYE PROTECTION** Required when possibility of contact with nitric acid exists.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT** An eye wash fountain and safety shower should be readily available where contact with nitric acid exists.

**SECTION 9 - SPECIAL PRECAUTIONS**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING** Store and handle according to packaged instructions. Store in a cool well-ventilated area. Keep away from reactive materials.

**OTHER PRECAUTIONS** Do not get in eyes, on skin, or on clothing. Avoid breathing vapor. Wash thoroughly after handling. Be prepared to neutralize.

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. ODV, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.