

A Division of Appropriate Chemical International Ltd.

120 Stronach Crescent, London, ON, N5V 3A1 1-800-387-9799 or 519-451-1614 www.anchemsales.com

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Nitric Acid 67% NI100-67

SECTION 01: PRODUCT INFORMATION AND COMPANY INFORMATION

MANUFACTURER: Same as above PREPARED BY: Production Department

 VERSION DATE:
 01-Jan-16

 TELEPHONE NO.:
 (519) 451-1614

 EMERGENCY PHONE NO.:
 (613) 996-6666

CHEMICAL FAMILY Inorganic mineral acid. CHEMICAL FORMULA Not Applicable

MOLECULAR WEIGHT: Not Applicable MATERIAL USE: Chemical intermediate. Photographical agent. Organic

SYNONYMS: Hydrogen nitrate; aqua fortis chemical synthesis. Manufacture of products.

SECTION 02: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Conc. LD/50 LC/50 (RTE/SPEC) TLV

Nitric Acid 66-67 7697-37-2-1 N.Av. Rat 67 ppm N.Av.

SECTION 03: HAZARD IDENTIFICATION

ROUTE OF ENTRY

Eyes: Corrosive to eye tissue and may cause severe damage and blindness.

Skin: Corrosive. Concentrated nitric acid chars the tissue with a characteristic yellow colouration. Causes severe

burns. Severe and fatal skin burns can occur with necrosis and scarring.

Inhalation: Causes severe respiratory irritation. Material is irritating to mucous membrane and upper respiratory tract.

Exposure can cause coughing, chest pains and difficulty in breathing. Vapours may cause pulmonary edema.

Ingestion: Corrosive! May cause severe pain in the mouth, chest and abdomen, leading to cough,

vomiting and collapse. Ingestion may cause gastritis possibly progressing to necrosis

or hemorrhage.

SECTION 04: FIRSTAID

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 30 minutes. Get medical

attention. Remove contaminated clothing and launder before reuse.

Eye Contact: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15

Inhalation, Acute: minutes and get medical attention immediately after flushing.

Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get

immediate medical attention.

Ingestion: Guard against aspiration into lungs by having the individual turn on to their left side. Rinse mouth

with water. Seek immediate medical attention. Do not induce vomiting. Never give anything by

mouth if victim is rapidly losing consciousness, unconscious or convulsing.

Notes to physician: Treatment based on sound judgment of physician and individual reactions of patient.

SECTION 05: FIRE EXPLOSION HAZARD AND FIRE FIGHTING MEASURES

FLAMMABLE? No

Will not burn IF YES, UNDER WHICH CONDITIONS? FLASH POINT (TCC) (C): Not Applicable

LEL(% BY VOL.): Not Applicable UEL(% BY VOL): Not Applicable FLAMMABLE LIMITS:

AUTO IGNITION TEMPERATURE (C): Not Applicable

EXTINGUISHING MEDIA: Use DRY chemicals, CO2, alcohol foam or water spray. Fire fighters

should wear full protective clothing, including self-contained breathing

equipment.

SPECIAL PROCEDURES: Reacts with metals to generate flammable hydrogen gas.

Oxidizer. Containers exposed to intense heat from fires should be cooled with water to prevent vapour pressure build-up which could result in container rupture. Slightly flammable in the presence of reducing materials, of combustible materials and of organic materials.

HAZARDOUS COMBUSTION PRODUCTS: Not Available UNUSUAL FIRE AND EXPLOSION HAZARDS Not Available SENSITIVITY TO STATIC DISCHARGE: Not Available SENSITIVITY TO MECHANICAL IMPACT: Not Available

SECTION 06: ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedure: Personal Precautionary Measures: Wear appropriate protective equipment.

Environmental Precautionary Measures: Prevent entry into sewers or streams, dike if

needed. Consult local authorities.

Procedure for Clean Up: Neutralize with lime slurry, limestone, or soda ash. Isolate spill and stop leak where safe. Flush area with water to remove trace residue. Contain spill with sand or other inert materials. Pick up solids and put in an appropriate sealed container for later

disposal. Isolate hazard area and restrict access.

SECTION 07: HANDLING AND STORAGE

Handling Procedures and Storage Requirements

Handling: A fresh air supply system must be used (i.e. Positive pressure self contained breathing apparatus). Avoid breathing vapor. Avoid contact with eyes, skin and clothing.

Storage: Tanks must be diked. Store in a cool, dry, well ventilated area. Place away from incompatible materials. Will corrode incompatible metals and many plastic materials. 304 or 347 stainless steel are acceptable materials of construction. Tanks should be vented and painted white or in light, heat-reflecting colors. Ensure that all pumps, valves, meters are of compatible material.

SECTION 08: PERSONAL PROTECTIVE EQUIPMENT / EXPOSURE CONTROLS

GLOVES/TYPE: Butyl rubber gloves.

RESPIRATOR/TYPE: If airborne concentrations exceed the Occupational Exposure Limit, use a NIOSH/MSHA

approved full facepiece respirator with acid gas cartridges. Do not use organic vapor and acid gas combination cartridges as these contain charcoal, which is incompatible with oxidizing

acids.

EYE/TYPE: Chemical goggles; also wear a face shield if splashing hazard exists.

OTHER/TYPE: Ensure that eyewash stations and safety showers are proximal to the work-station location.

ENGINEERING CONTROL Local exhaust ventilation as necessary to maintain exposures to

within applicable limits.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE/APPEARANCE: Liquid Brownish/Yellow

ODOUR: Slight Pungent **ODOUR THRESHOLD:** N. Av.

Antiseptic like.

VAPOUR PRESSURE (mm Hg @ 20C): N. Av. VAPOUR DENSITY (Air=1): N. Av. **EVAPORATION RATE (Ether = 1):** SPECIFIC GRAVITY: 1.096 N Av **BOILING POINT (C):** FREEZING POINT (C): N. Av. N. Av. Ph (% SOLUTION): N. Av. % VOLATILE (WT): N. Av. **SOLUBILITY IN WATER (% W/W)** N. Av.

SECTION 10: STABILITY AND REACTIVITY

CHEMICALLY STABLE? Yes

IF NO, UNDER WHICH CONDITIONS?: N. App.

INCOMPATIBILITY WITH OTHER SUBTANCES Yes

IF YES, WITH WHICH ONES: Alkalies. Reducing agents. Combustible materials. Metals.

Organic materials. Acids. Moisture.

SPECIAL REACTIVITY AND UNDER WHAT CONDITIONS: Corrosive to mild metals such as copper, aluminum, brass,

iron, and mild steel. Not corrosive to 304L or 316 stainless steel. Will release flammable and potentially explosive hydrogen gas on contact with amphoteric metals.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL N. Av.

LC 50 OF MATERIAL, SPECIES AND ROUTE See Sec. 2 LD 50 OF MATERIAL, SPECIES AND ROUTE See Sec. 2

CARCINOGENICITY OF MATERIAL

REPRODUCTIVE EFFECTS:

IRRITANCY OF MATERIAL

N. Av.

SENSITIZING CAPABILITY OF MATERIAL

N. Av.

SYNERGISTIC MATERIALS:

N. Av.

SECTION 12: ECOLOGICAL INFORMATION

AQUATIC TOXICITY: Toxic to aquatic life.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Disposal of Waste Method: Disposal of all wastes must be done in accordance with municipal,

provincial and federal regulations.

Contaminated Packaging: Empty containers should be recycled or disposed of through an approved

waste management facility.

SECTION 14: TRANSPORT INFORMATION

TDG CLASSIFICATION: Class 8, Nitric Acid Solution

UN NUMBER: 2031
PACKING GROUP: II

Special Provisions for Transport

SECTION 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION: C, E

C OXIDIZING MATERIALS E CORROSIVE MATERIAL

SECTION 16: OTHER INFORMATION

ABBREVIATIONS USED: N.Av. = Not Available

N.App. / N.Ap. = Not Applicable

DISCLAIMER: Although the information herein is to the best of our knowledge accurate, no guarantee

expressed or implied, is made regarding the information or the performance of any product. We assume no liability for incidental or direct damages of any kind, no matter what, including

negligence.

SOURCES: Supplier MSDS

For updated copies of an MSDS, please contact Anchem Sales at the address/phone number on Page 1 or fax the MSDS Co-ordinator at (519) 451-4593.

LAST PAGE

Form 074 Revised Aug 2016