

Preparing for the New Era of Laboratories

# MATERIAL SAFETY DATA SHEET (MSDS)

According to regulation (EU) no.1907/2006

## **NITRIC ACID 69% AR**

: A-2012
: 7697-37-2
: HNO <sub>3</sub>
:2031

website : www.labotiq.net



MSDS Number: 0247

Date : Aug 28th, 2024

Version: 1.0

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Name Synonyms	: NITRIC ACID 69% AR : Azotic Acid, Hydrogen Nitrate, Acidium Nitricium
CAS No.	:7697-37-2
HS Code	: 2808 00 10
<b>Chemical Formula</b>	: HNO <sub>3</sub> in water
Molecular Weight	: 63.01 g/mol
Product Code	: A-2012
Brand	: Labotiq
1.2 Manufacturer	: Labotiq
Address	: Jl.Terapi Raya AD2-Bumi Menteng Asri Bogor, Jawa Barat Indonesia – 16111
Website	: <u>www.labotiq.net</u>
Email	: <u>labotiq.id@gmail.com,</u>
For information	: Phone : (+62-251) 839110, 8311662, Fax : (+62-251) 83135710
Emergency number	:+6281316894650
1.3 Application	: Laboratory chemicals, Manufacture of substances, General Chemical reagent

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 Oxidizing liquids (Category 3), H272 Corrosive to Metals (Category 1), H290 Acute toxicity, Inhalation (Category 3), H331 Skin corrosion (Sub-category 1A), H314 Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16

#### 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Hazard statement(s) H272 H290 H314 H331

Precautionary statement(s) P210

P220

Danger

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

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials.



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P280	Wear protective gloves/ protection/ face protection/ h	
P303 + P361 + P353	IF ON SKIN (or hair): Tal contaminated clothing. Rinse s	ke off immediately all
P304 + P340 + P310	IF INHALED: Remove persor comfortable for breathing. Im CENTER/ doctor.	n to fresh air and keep
P305 + P351 + P338	IF IN EYES: Rinse cautiously minutes. Remove contact lens do. Continue rinsing.	
Supplemental Hazard Statements EUH071	Corrosive to the respiratory tr	act.

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Synonyms	: NITRIC ACID 69 - 71%
Formula	: HNO3 in water
Molecular weight	: 63.01 g/mol
CAS-No.	: 7697-37-2
EC-No.	:

#### 3.2 Mixture

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
Nitric acid CAS-No. 7697-37-2 EC-No. 231-714-2 Index-No. 007-004-00-1	Ox. Liq. 3; Met. Corr. 1; Acute Tox. 3; Skin Corr. 1A; Eye Dam. 1; H272, H290, H331, H314, H318 Concentration limits: >= 1 %: Met. Corr. 1, H290; 1 - < 5 %: Skin Irrit. 2, H315; 1 - < 3 %: Eye Irrit. 2, H319; >= 3 %: 1, H318; >= 65 %: Ox. Liq. 3, H272; >= 20 %: Skin Corr. 1A, H314; 5 - < 20 %: Skin Corr. 1B, H314;	>= 65 - < 70 %

For the full text of the H-Statements mentioned in this Section, see Section 16.



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#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

#### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

#### Suitable extinguishing media

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

#### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

#### 5.2 Special hazards arising from the substance or mixture

Nitrogen oxides (NOx) Not combustible. Has a fire-promoting effect due to release of oxygen. Ambient fire may liberate hazardous vapours.

#### **5.3 Advice for firefighters**

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

#### **5.4 Further information**

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

#### SECTION 6: Accidental release measures



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#### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

#### 6.2 Environmental precautions

Do not let product enter drains.

#### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

#### 6.4 Reference to other sections

For disposal see section 13.

#### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

#### Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition.

#### Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

#### 7.2 Conditions for safe storage, including any incompatibilities

#### **Storage conditions**

No metal containers. Tightly closed. Keep locked up or in an area accessible only to qualified or authorized persons. Do not store near combustible materials.

#### Storage class

Storage class (TRGS 510): 5.1B: Oxidizing hazardous materials

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

#### SECTION 8: Exposure controls/personal protection

#### **8.1 Control parameters**

#### 8.2 Exposure controls

#### Appropriat engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

#### Personal protective equipment

#### **Eye/face protection**

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).



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#### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### **Full contact**

Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740, Size M)

#### Splash contact

Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740, Size M)

#### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

I mor mation on basic physical and	chemical properties
Appearance	Form: liquid
	Colour: light yellow
Odour	No data available
Odour Threshold	No data available
рН	No data available
Melting point/freezingpoint	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or	No data available
explosive limits	No data available
Vapour pressure	No data available



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Vapour density	No data available	

**Relative density** Water solubility Partition coefficient: noctanol/water No data available Auto-ignition temperature Decomposition temperature Viscosity **Explosive properties** Oxidizing properties

No data available Not classified as explosive. No data available

#### 9.2 Other safety information

No data available

#### **SECTION 10: Stability and reactivity**

#### **10.1 Reactivity**

No data available

#### **10.2 Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature). Stable under recommended storage conditions.

#### **10.3 Possibility of hazardous reactions**

No data available

#### **10.4 Conditions to avoid**

May discolor on exposure to air and light.

#### **10.5 Incompatible materials**

Strong oxidizing agentsMetalss

#### **10.6 Hazardous decomposition products**

In the event of fire: see section 5

### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### Acute toxicity

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Acute toxicity estimate Inhalation - 4 h - 3,79 mg/l - vapor(Calculation method) Symptoms: Possible symptoms:, mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract Dermal: No data available

#### Skin corrosion/irritation

Mixture causes severe burns.

#### Serious eve damage/eve irritation

Mixture causes serious eye damage. Risk of blindness!

#### Respiratory or skin sensitisation

No data available

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**Germ cell mutagenicity** No data available

#### Carcinogenicity

IARC:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

## Reproductive toxicity

No data available

**Specific target organ toxicity - single exposure** No data available

**Specific target organ toxicity - repeated exposure** No data available

## Aspiration hazard

No data available

#### Additional Information

RTECS: QU5775000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Other dangerous properties can not be excluded.

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

No data available

#### **12.2 Persistence and degradability** No data available

No data available

#### 12.3 Bioaccumulative potential

No data available

#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

No data available

### **SECTION 13: Disposal considerations**

#### **13.1 Waste treatment methods**

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

IATA:

**14.4 Packaging group** ADR/RID: II

Nitric acid

**14.3 Transport hazard class(es)** ADR/RID: 8 (5.1)

**14.5 Environmental hazards** ADR/RID: no

**14.6 Special precautions for user Further information** No data available

Passenger Aircraft: Not permitted for transport

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IATA: 8 (5.1)

IATA: II

IATA: no

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<b>Contaminated packaging</b> Dispose of as unused produc	ct.				
SECTION 14: Transport information					
14.1 UN number					
ADR/RID: 2031	IMDG: 2031	IATA: 2031			
14.2 UN proper shipping name					
ADR/RID: NITRIC ACID					
IMDG: NITRIC ACID					

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IMDG Marine pollutant: no

IMDG: 8 (5.1)

IMDG: II

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

#### **SECTION 16: Other information**

#### Full text of H-Statements referred to under sections 2 and 3.

- EUH071 Corrosive to the respiratory tract.
- H272 May intensify fire; oxidizer.
- H290 May be corrosive to metals.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H330 Fatal if inhaled.
- H331 Toxic if inhaled.

#### National Fire Protection Association (U.S.A.):

Health: 3 Flammability: 0 Reactivity: 0



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#### Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Labotiq shall not be held liable for any damage resulting from handling or from contact with the above product.

Version : 1.0 Revision Date : August 28, 2024