

## SAFETY DATA SHEET

### 1. Identification of the substance / preparation and company.

#### 1.1 Product identifier

Product Nr. CL00.1928  
Trade name Nitric acid 70% a.r.  
REACH Registration Number 01-2119487297-23  
CAS-No. 7697-37-2

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Reagent for analysis  
In compliance with the conditions described in the annex to this safety data sheet.

#### 1.3 Information provided by AnalytiChem Belgium NV product service.

Responsible department: AnalytiChem Belgium NV  
Industriezone "De Arend" 2  
B-8210 Zedelgem  
BELGIUM  
Tel. +32 50 28 83 20 e-mail: info.be@analytichem.com

#### 1.4 Emergency telephone: 00 (32) 50.28.83.20

### 2. Hazard identification

#### 2.1 Classification of the substance or the mixture (EG 1272/2008)

Oxidising liquid, Categorie 3, H272  
Skin corrosion/irritation, Categorie 1A, H314  
Substance or mixture corrosive to metals, Categorie 1, H290  
Acute toxicity, Inhalation, Categorie 3, H331

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

For the full text of R-sentences mentioned in this Section, see Section 16

#### 2.2 GHS-Labeling

GHS-Labeling Labelling (REGULATION (EC) No 1272/2008) (EG 1272/2008)

Hazard pictograms:



Signal word:

Danger :

Hazard statements:

H272	May intensify fire; oxidiser.
H314	Causes severe skin burns and eye damage.
H290	May be corrosive to metals.
H331	Toxic if inhaled.

EUH071

Corrosive to the respiratory tract.

## Precautionary statements:

P260 Do not breathe dust, fume, gas, mist, vapours, spray.  
 P280 Wear protective gloves, protective clothing, eye protection, face protection.  
 P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
 P309 + P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## Reduced labelling

## Hazard pictograms:



## Signal word:

Danger :

## Hazard statements:

H314 Causes severe skin burns and eye damage.

## Precautionary statements:

P280 Wear protective gloves, protective clothing, eye protection, face protection.  
 P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
 P309 + P310 IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**3. Composition / Information on ingredients.****3.1 Substance**

CAS-No. 7697-37-2  
 EC-Nr 231-714-2  
 Index-No 007-004-00-1  
 Formula HNO<sub>3</sub>/H<sub>2</sub>O

Component	Cas-No.	Concentration	Classification (REGULATION (EC) No 1272/2008)
Nitric acid 70% a.r.	7697-37-2	69+% HNO <sub>3</sub> - (Appearance of a yellowish tinge in the container has	Ox. Liq. 3 (H272) Skin Corr. 1A (H314) Met. Corr. 1 (H290) Acute Tox. (inhal.) 3 (H331)

		no impact on product quality).	
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Component	Reach Number
Nitric acid 70% a.r.	01-2119487297-23

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

### 3.2 Mixture

Not applicable

## 4. First aid measures.

### 4.1 Description of first aid measures

#### General advice

First-aid personnel: ensure self-protection!

After inhalation: Remove to fresh air, seek medical advice.

After contact with skin: Wash off with plenty of water. Dab with polyethylene glycol 400. Remove contaminated clothing. Immediately call in physician.

After contact with eyes: Rinse out with plenty of water for at least 10 minutes with the eyelid held wide open. Immediately call an ophthalmologist.

After ingestion: Never give anything by mouth to an unconscious person. Make victim drink water (two glasses at most), avoid vomiting (risk of perforation!). Immediately call in physician. Do not attempt to neutralize.

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

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

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

No data available

## 5. Fire fighting measures.

### 5.1 Extinguishing media

#### Suitable extinguishing media

In adaption to materials stored in the immediate neighbourhood.

#### Unsuitable extinguishing media

Cool container with spray water from a safe distance. Contain escaping vapours with water. Prevent fire-fighting water from entering surface water or groundwater.

### 5.2 Special hazards arising from substance or mixture

Non-combustible. Ambient fire may liberate hazardous vapours.

### 5.3 Advice for firefighters

Do not stay in dangerous zone without self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

### 5.4 Further information

No data available

## **6. Accidental release measures.**

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

Do not inhale vapours/aerosols. Avoid substance contact. Ensure supply of fresh air in enclosed rooms.  
For personal protection see section 8.

### **6.2 Environmental precautions**

Do not allow to enter sewerage system.

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

Absorb on vermiculite, sand or a pillow from Chemical Spill Center.

### **6.4 Reference to other sections**

For disposal see section 13.

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## **7. Handling and storage.**

### **7.1 Precautions for safe handling**

Use skin, hand and eye protection  
For precautions see section 2.2

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

Corrosives-area. Keep container tightly closed.  
Recommended storage temperature see product label.

### **7.3 Specific end use(s)**

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

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## **8. Exposure controls - Personal protection.**

### **8.1 Control parameters**

### **8.2 Exposure controls**

#### **Engineering measures**

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

See section 7.1

#### **Individual protection measures**

Immediately change contaminated clothing. Apply skin- protective barrier cream. Wash hands and face after working with substance. Under no circumstances eat or drink at workplace. Work under hood . Do not inhale substance.

#### **Respiratory protections**

Required when vapours/aerosols are generated.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

#### **Eye protection**

Required.

#### **Hand protection**

Required.

#### **Body protection**

Required.

#### **Environmental exposure controls**

Do not allow to enter sewerage system.

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## **9. Physical and chemical properties.**

### **9.1 Information on basic physical**

#### Appearance

Form: Liquid  
Colour: Colourless  
Odour: specific

#### Changes in physical state

Melting Point: -41°C  
Boiling point: 122°C  
Flash point: -  
Ignition temperature:  
Mol. Weight: 63.01 g/mol  
Density: 1,41 g/ml  
pH value: pH < 1  
Solubility in water: soluble  
Explosion limits:

### **9.2 Other data**

No further relevant information available.

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## **10. Stability and reactivity.**

### **10.1 Reactivity**

See section 10.3

### **10.2 Chemical stability**

No further relevant information available.

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

Avoid contact with acids, metals, combustible materials, heat and sun light.

### **10.4 Conditions to avoid**

No further relevant information available.

### **10.5 Incompatible materials**

No further relevant information available.

### **10.6 Hazardous decomposition products**

No further relevant information available.

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## **11. Toxicological information.**

### **11.1 Information on toxicological effects**

Acute oral toxicity  
LD50 orl. rat 430 mg/kg

Acute inhalation toxicity  
No further relevant information available.

Acute dermal toxicity  
No further relevant information available.

Skin irritation  
No further relevant information available.

Eye irritation  
No further relevant information available.

Sensitisation  
No further relevant information available.

Germ cell mutagenicity  
No further relevant information available.

Carcinogenicity  
No further relevant information available.

Reproductive toxicity  
No further relevant information available.

Teratogenicity  
No further relevant information available.

Specific target organ toxicity - single exposure  
No further relevant information available.

Specific target organ toxicity - repeated exposure  
No further relevant information available.

Aspiration hazard  
No further relevant information available.

#### **11.2 Further information**

No further relevant information available.

Further data:

Handle in accordance with good industrial hygiene and safety practice..

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### **12. Ecological information.**

#### **12.1 Toxicity**

No further relevant information available.

#### **12.2 Persistence and degradability**

No further relevant information available.

#### **12.3 Bioaccumulative potential**

No further relevant information available.

#### **12.4 Mobility in soil**

No further relevant information available.

#### **12.5 Results of PBT and vPvB assessment**

No further relevant information available.

#### **12.6 Other adverse effects**

Do not allow to enter waters, waste water, or soil!

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### **13. Disposal considerations.**

Product: Chemicals must be disposed of in compliance with the respective national regulations. Packaging: Chem-lab product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

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### **14. Transport information.**

#### **Land Transport (ADR/RID)**

##### **14.1 UN number**

UN 2031

<b>14.2 Proper shipping name</b>	Nitric acid other than red fuming, with $\geq 65\%$ but $\leq 70\%$ nitric acid
<b>14.3 Class</b>	8 (5.1)
<b>14.4 Packing group</b>	II
<b>14.5 Environmentally hazardous</b>	-
<b>14.6 Special precautions for user</b>	yes
Tunnel restriction code	(E)

#### **Inland waterway transport (ADN)**

Not relevant

#### **Air Transport (IATA)**

<b>14.1 UN number</b>	UN 2031
<b>14.2 Proper shipping name</b>	Nitric acid other than red fuming, with $\geq 65\%$ but $\leq 70\%$ nitric acid
<b>14.3 Class</b>	8 (5.1)
<b>14.4 Packing group</b>	II
<b>14.5 Environmentally hazardous</b>	-
<b>14.6 Special precautions for user</b>	yes

#### **Sea Transport (IMDG)**

<b>14.1 UN number</b>	UN 2031
<b>14.2 Proper shipping name</b>	Nitric acid other than red fuming, with $\geq 65\%$ but $\leq 70\%$ nitric acid
<b>14.3 Class</b>	8 (5.1)
<b>14.4 Packing group</b>	II
<b>14.5 Environmentally hazardous</b>	-
<b>14.6 Special precautions for user</b>	yes

#### **14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not relevant

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### **15. Regulatory information.**

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

For this product an assessment was not carried out.

#### **15.2 Chemical Safety Assessment**

For this product an assessment was not carried out.

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### **16. Other information.**

The information and recommendations in this MSDS are to the best of our knowledge, information and belief accurate at the date of publications. Although utmost care has been taken in the composition of this text, the publisher cannot be held responsible for any damage resulting from any possible error in this publications.

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

H272 May intensify fire; oxidiser.

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

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### **Exposure scenario 1 (Industrial use)**

#### **1. Industrial use Reagent for analysis, (Chemical production)**

##### **Sectors of end-use**

- SU 3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- SU 9 Manufacture of fine chemicals
- SU10 Formulation [mixing] of preparations and/ or re-packaging (excluding alloys)

#### **Chemical product category**

- PC19 Removed from PC list and relocated in the technical function list (Table R.12- 15)24.
- PC21 Laboratory chemicals

#### **Process categories**

- PROC 1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
- PROC 2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
- PROC 3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
- PROC 4 Chemical production where opportunity for exposure arises
- PROC 5 Mixing or blending in batch processes
- PROC 8a Transfer of substance or mixture (charging and discharging) at non- dedicated facilities 26
- PROC 8b Transfer of substance or mixture (charging and discharging) at dedicated facilities26
- PROC 9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
- PROC10 Roller application or brushing
- PROC15 Use as laboratory reagent

#### **Environmental Release Categories**

- ERC 1 Manufacture of the substance
- ERC 2 Formulation into mixture
- ERC 4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
- ERC 6a Use of intermediate
- ERC 6b Use of reactive processing aid at industrial site (no inclusion into or onto article)

## **2. Contributing scenarios: Operational conditions and risk management measures**

### **Exposure scenario 2 (Professional use)**

#### **1. Industrial use Reagent for analysis, (Chemical production)**

##### **Sectors of end-use**

- SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

##### **Chemical product category**

- PC21 Laboratory chemicals

##### **Process categories**

- PROC15 Use as laboratory reagent

##### **Environmental Release Categories**

- ERC 2 Formulation into mixture
- ERC 6a Use of intermediate
- ERC 6b Use of reactive processing aid at industrial site (no inclusion into or onto article)

#### **2. Contributing scenarios: Operational conditions and risk management measures**