

**Acide nitrique 68 % PUR****L-A-T-N****Danger****SECTION 1. Identification of the substance/mixture and of the company/undertaking**

Ref. n° : 106 011  
Trade name : Acide nitrique 68 % PUR  
Company identification : JEULIN  
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Use : laboratory use

**SECTION 2. Hazards identification**

Classification EC 67/548 or EC 1999/45 : C; R35

**Globally Harmonized System of Classification and Labelling of Chemicals (GHS)****Hazard Class and Category Code**

- Physical hazards : Oxidizing liquids - Category 3 - Warning (CLP : Ox. Liq. 3)
- Health hazards : Skin corrosion - Category 1A - Danger

**Label elements**

- Hazard pictograms



- Signal words : Danger
- Hazard statements : H272 : May intensify fire; oxidiser.  
H314 : Causes severe skin burns and eye damage.

**Precautionary statements**

- General : P102 : Keep out of reach of children.
- Prevention : P280 : Wear protective gloves/protective clothing/eye protection/face protection. P210 : Keep away from heat. P221 : Take any precaution to avoid mixing with combustibles... P260 : Do not breathe dust/fume/gas/mist/vapours/spray.
- Response : P305+P351+P338+P310+P321 : IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. Specific treatment. P303+P361+P352 : IF ON SKIN (or hair) : Remove immediately all contaminated clothing. Wash with plenty of soap and water.
- Storage : P405 : Store locked up.



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## SECTION 3. Composition/information on ingredients

This product is considered to be hazardous and contains hazardous components.

Substance name	Value(s)	CAS nr	EC	EC index	REACH	CERTIFICATE
Nitric acid	: 68 ca %	7697-37-2	231-714-2	007-004-00-1	----	O; R8 C; R35 ----- Ox. Liq. 3 (H272) Skin Corr. 1A+ (H314)
Eau	:	7732-18-5	----	----	----	Not classified. (DSD/DPD) ----- Not classified. (GHS)

## SECTION 4. First aid measures

- **Inhalation** : If you feel unwell, seek medical advice.  
If breathing is difficult, give oxygen. Assure fresh air breathing. If not breathing, give artificial respiration.
- **Skin contact** : Wash skin thoroughly with water. Remove contaminated clothing and shoes.
- **Eye contact** : In case of eye contact, immediately rinse with clean water for 10-15 minutes. Contact ophthalmologist immediately.
- **Ingestion** : **Do not induce vomiting because of corrosive effects.**  
: If swallowed, rinse mouth with water (only if the person is conscious). Seek medical attention immediately.

## SECTION 5. Fire-fighting measures

- Prevention** : Keep away from heat. Keep away from : Metals. Combustible material.
- Extinguishing media** : Use extinguishing media appropriate for surrounding fire.
- **Suitable** : Use extinguishing media appropriate for surrounding fire.
- Special exposure hazards** : On exposure to high temperature, may decompose, releasing toxic gases. Contact with combustible material may cause fire. May accelerate the burning of other combustible materials.  
Thermal decomposition generates : Nitrogen oxides.  
Reacts with metals and light metals, releasing hydrogen, gas that can cause fires and explosions.
- Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory protection.
- Special procedures** : Use water spray or fog for cooling exposed containers. Knock down vapour cloud with water spray or other appropriate solution. Avoid (reject) fire-fighting water to enter environment.

## SECTION 6. Accidental release measures

- Environmental precautions** : Prevent entry to sewers and public waters.
- After spillage and/or leakage** : Clean up any spills as soon as possible, using an absorbent material to collect it. (ex: Vermiculite JEULIN réf. 150 039, absorbant pour liquides JEULIN réf. 150 027).  
Neutralize spills with neutralization agent such as lime, or soda.  
Flush/dilute residue with water.  
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
- For emergency responders** : Do not breathe vapours. Wear recommended personal protective equipment.
- Technical measures** : Evacuate and limit access.

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### SECTION 7. Handling and storage

- Precautions in handling and storage** : Both local exhaust and good general room ventilation must be provided not only to control exposure but also to prevent formation of flammable mixtures. Use special care to avoid static electric charges. Handle and open container with care.
- Handling** : Wear suitable protective clothing.  
Avoid all unnecessary exposure.  
Do not breathe gas, fumes, vapour or spray.
- Storage** : Close container tightly after use.  
Store in dry, cool, well-ventilated area.  
Keep away from heat. (< 25 °C)  
Keep away from combustible material.

### SECTION 8. Exposure controls/personal protection

- Personal protection** : Avoid all unnecessary exposure.
- Respiratory protection** : In case of insufficient ventilation, wear suitable respiratory equipment. Where exposure through inhalation may occur from use, approved respiratory protection equipment is recommended.
- Hand protection** : Wear suitable gloves resistant to chemical penetration.
- Skin protection** : Wear suitable protective clothing.
- Eye protection** : Chemical goggles or safety glasses.
- Others** : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.  
Use good housekeeping practices to avoid rendering dust airborne.  
Local exhaust is recommended where dust may occur.

**Exposure controls**

- France**
- VME [mg/m<sup>3</sup>] : 5
- VME [ppm] : 2
- VLE [mg/m<sup>3</sup>] : 10
- VLE [ppm] : 4

### SECTION 9. Physical and chemical properties

- Chemical name** : Acide nitrique ; acide azotique ; nitrate d'hydrogène.
- Physical state** : Liquid.
- Colour** : Colourless.
- Odour** : Pungent.
- Molecular weight** : 63.2
- Melting point [°C]** : - 41°C (env.)
- Initial boiling point [°C]** : 121 (env.)
- Density** : (20 °C) : 1,41
- Vapour pressure [hPa]** : (20 °C) : 35
- Solubility in** : Water. (20 °C) : soluble.
- Flash point [°C]** : Not applicable.
- Auto-ignition temperature [°C]** : Not applicable.
- Explosion limits**
- Explosion limits - lower [%]** : Not applicable.
- Explosion limits - upper [%]** : Not applicable.



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### SECTION 10. Stability and reactivity

<b>Conditions to avoid</b>	: Light sensitive. Heat sensitive. Contact with metallic substances.
<b>Materials to avoid</b>	: Metals. Alkali metals: Sodium (Na), Potassium (K). Alkaline-earth metals: Magnesium (Mg), Calcium (Ca). Strong bases. (NaOH, KOH, NH <sub>3</sub> ...). Organic compounds. (composés halogénés, cétones, aldéhydes, amines, alcools, nitriles...). Hydrogen peroxide.
<b>Hazardous reactions</b>	: Reacts violently with : Organic compounds. Reducing agents. Reacts with metals and light metals, releasing hydrogen, gas that can cause fires and explosions.
<b>Hazardous decomposition products</b>	: Nitrogen oxides.
<b>Hazardous Polymerization</b>	: Will not occur.
<b>Hazardous properties</b>	: Reacts violently with water. Never add water to this product. Oxidizer.

### SECTION 11. Toxicological information

<b>Acute toxicity</b>	
- Inhalation	: May be harmful if inhaled. Fumes / dust / aerosols very corrosive to the respiratory tract and mucous membranes. Risk of pulmonary oedema.
- Dermal	: Causes severe burns.
- Ocular	: Highly corrosive to eyes. Risk of serious permanent damages to eyes if the product is not rapidly removed. Direct contact may result in corneal injury.
- Ingestion	: The ingestion causes severe corrosion can lead to tissue destruction of the mouth, throat and gastrointestinal tract. Gastrointestinal Bleeding, stomach and esophageal perforations, necrosis and metabolic acidosis, digestive stenosis. Death in extreme cases.
- Other	: This material or its emissions may induce blood disorders and/or aggravate pre-existing blood disorders. Overexposure to this material may result in methemoglobinemia. Other toxic properties can not be excluded.
<b>Rat oral LD50 [mg/kg]</b>	: No data available.
<b>Rabbit dermal LD50 [mg/kg]</b>	: No data available.
<b>Rat inhalation LC50 [mg/kg]</b>	: No data available.
<b>Rat inhalation LC50 [mg/l/4h]</b>	: No data available.
<b>Dermal irritation (rabbit)</b>	: No data available.
<b>Eyes irritation (rabbit)</b>	: No data available.
<b>Mucous membrane irritation (rabbit)</b>	: No data available.
<b>Chronic toxicity</b>	
- Other	: There are potential chronic health effects to consider.
<b>Mutagenicity</b>	: The data available on mutagenic potential of this product are contradictory. Additional researches are needed. Observe all precautions and avoid exposure. The suspected mutagenicity appears to be linked to the presence of nitrogen oxides in the fumes of nitric acid. These nitrogen oxides are mutagenic in several tests in vitro and in vivo.
<b>Teratogenicity</b>	: Possible risk of harm to the unborn child.
<b>Other toxicological information</b>	: Other toxic properties can not be excluded. Observe all precautions for handling chemicals. For more toxicological informations, read the INRS data sheet # : 9.



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## SECTION 12. Ecological information

- Ecological effects information** : Toxic to aquatic life.  
Harmful effect by changing the pH.  
Avoid release to the environment.  
Fertilizing effect.
- Bioaccumulative potential** : No data available.
- Information on elimination** : Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
- Biodegradation [%]** : No data available.

## SECTION 13. Disposal considerations

- Disposal** : Dispose of this material and its container at hazardous or special waste collection point. Containers, or internal liners coming from a container, having contained this product are also considered as hazardous wastes.  
Do not re-use empty container.  
Dispose in a safe manner in accordance with local/national regulations.
- : **Do not empty into drains.**
- Waste-disposal procedures** : Refer to the MSDS before handling or disposing.

## SECTION 14. Transport information

- General information**
- Land transport**
- Sea transport**
- IMO-IMDG code : UN 2031 Acide nitrique
- Class : 8
- Packing group : II
- Air transport**
- ICAO/IATA : UN 2031 Nitric acid
- IATA - Class or division : 8
- IATA Packing group : II

## SECTION 15. Regulatory information

- Other** : None.

## SECTION 16. Other information

- R Phrase(s)** : R35 : Causes severe burns.

The contents and format of this MSDS are in accordance with Regulation (EC) N°1907/2006.

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