

NITRIC ACID 60% 40° BE PRS

Material Safety Data Sheets (MSDS)

Revision date: 14/4/2008

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING.

1.1 Identification of the substance or preparation.

Name: NITRIC ACID 60% 40° BE PRS
Code: A0500

1.2 Use of the substance/preparation.

1.3 Identification of the company.

Company: Rams-Martínez, S.L. [Group T3]
Address: Torrent d'en Baiell, 36
City: SENTMENAT
Province: Barcelona
Telephone: +34 937152001
Fax: +34 937152379
E-mail: msds@groupt3.commsds@groupt3.com

1.4 Emergency telephone number: 915620420

2. HAZARDS IDENTIFICATION.

Contact with combustible material may cause fire.
Causes severe burns.

3. COMPOSITION OF/INFORMATION ABOUT THE COMPONENTS.

Substances presenting a health or environmental hazard within the meaning of Directive 67/548/EEC:

<i>Index No</i>	<i>CAS No.</i>	<i>EC No</i>	<i>Registration number</i>	<i>Name</i>	<i>Concentrate %</i>	<i>Symbols</i>	<i>R phrases *</i>
007-004-00-1	7697-37-2	231-714-2		nitric acid ... %	20 - 75 %	O C	R8 R35

* *The complete text of the R phrases is given in section 16 of this Safety Data Sheet.*

4. FIRST AID.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration. Do not administer anything orally. If unconscious, place them in a suitable position and seek medical assistance.

Eye contact.

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If wearing contact lenses, remove them. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact.

Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. **NEVER** use solvents or thinners.

Ingestion.

If accidentally ingested, seek immediate medical attention. Keep calm. **NEVER** induce vomiting.

5. FIRE FIGHTING MEASURES.

Recommended extinguishing methods.

Extinguisher powder or CO₂. In case of more serious fires, also alcohol-resistant foam and water spray. Do not use a direct stream of water to extinguish.

Special risks.

Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.

Other recommendations.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways.

6. MEASURES TO TAKE IN CASE OF ACCIDENTAL SPILL.

Individual precautions.

Eliminate possible ignition points and ventilate the area. Avoid breathing fumes. For exposure control and individual protection measures, see section 8.

Cleaning methods.

Pick up the spill with non-combustible absorbent materials (soil, sand, vermiculite, diatomite, etc.). Pour the product and the absorbent in an appropriate container. The contaminated area should be immediately cleaned with an appropriate de-contaminator. Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced. For later elimination of waste, follow the recommendations under section 13.

Environmental protection precautions.

Prevent the contamination of drains, surface or subterranean waters, and the ground. In case of large spills or if the product contaminates lakes, rivers, or sewers, inform the responsible authorities according to local legislation.

7. HANDLING AND STORAGE.

7.1 Handling.

The fumes are heavier than air and can spread across the ground. They can form explosive mixtures with air. Prevent the creation of flammable or explosive fume concentrations in the air; prevent fume concentrations above work exposure limits. The preparation must only be used in areas where all unprotected flames and other ignition points have been eliminated. Electrical equipment has to be protected according to applicable standards.

The preparation can be electrostatically charged: always use earth grounds when transferring the product. Operators must use anti-static footwear and clothing, and floors must be conductors.

Keep the container tightly closed and isolated from heat sources, sparks, and fire. Do not use tools that can cause sparks.

Prevent the preparation from contacting the skin or eyes. Avoid the inhalation of fumes and mists that form when spraying.

For personal protection, see section 8. Never use pressure to empty the containers. They are not pressure-resistant containers.

In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety.

Keep the product in containers made of a material identical to the original.



7.2 Storage.

Store according to local legislation. Observe indications on the label. Store the containers between 5 and 35° C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorized persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

7.3 Specific use(s).

8. EXPOSURE CONTROL/PERSONAL PROTECTION.

8.1 Exposure limits.

Work exposure limit for:

Name	VLA-ED *		VLA-EC *	
	ppm	mg/m ³	ppm	mg/m ³
nitric acid ... %			1	2,6

* According to the list of Limit Environmental Professional Exposure Values adopted by the National Institute for Safety and Hygiene at Work for the year 2007.

8.2 Exposure controls

Measures of a technical nature: provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system. If this were not enough to keep the particulate and fume concentrations of the solvent below the work exposure limit, suitable breathing equipment must be used.

Breathing protection: when workers are subjected to concentrations above the exposure limit, they must use suitable and officially approved equipment. Use active carbon masks.

Hand protection: for prolonged or repeated contact, use polyvinyl alcohol or nitrile rubber types of gloves. Protective creams can help to protect exposed areas of the skin. These creams must **NEVER** be applied once exposure has occurred.

Eye protection: use protective goggles especially designed to protect against liquid splatters. Install emergency eyewashes near the use area.

Skin protection: personnel must wear anti-static clothing made of natural fibre or synthetic fibres resistant to high temperatures. All body parts that have been in contact with the preparation must be washed.

9. PHYSICAL AND CHEMICAL PROPERTIES.

9.1. General information.

Aspect: Liquid with characteristic odour
Smell: Característica acre y sofocante

9.2. Important health, safety and environmental information.

pH: <1
Boiling Point: 107 °C
Flash point: °C

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Inflammability (solid, gas):
Explosive properties:
Combustive properties:
Vapour pressure: 6.4 KPa (a 20 °C)
Relative density: 1.37 g/cm³ (60%) gr/cm³
Solubility
 Hydrosolubility:
 Liposolubility:
Distribution coefficient (n-octanol/water):
Viscosity:
Vapour density: 2.2 (aire =1)
Evaporation velocity:

10. STABILITY AND REACTIVITY.

Stable under the recommended handling and storage conditions (see section 7).
In case of fire, dangerous decomposition products can be generated, such as carbon monoxide and dioxide and nitrogen fumes and oxides.
Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

11. TOXICOLOGICAL INFORMATION.

There are no tested data available on the product. Exposure to concentrations of solvent fumes above the work exposure limit can have negative effects (for example, irritation of the mucous membranes and respiratory system, adverse effects on the kidneys, liver, and the central nervous system). Among the symptoms are headaches, vertigo, fatigue, muscular weakness, drowsiness, and in extreme cases, unconsciousness.
Repeated or prolonged contact with the preparation can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the preparation through the skin.
Splatters in the eyes can cause irritation and irreversible damage.

12. ECOLOGICAL INFORMATION.

There are no tested data available on the preparation. The product must not be allowed to go into sewers or waterways.
Prevent penetration into the ground. Prevent the emission of solvents into the atmosphere.

13. ELIMINATION CONSIDERATIONS.

Dumping into sewers or waterways is prohibited. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

14. INFORMATION PERTAINING TO TRANSPORT.

Transport following ADR/TPC rules for highway transport, RID rules for railway, IMDG for sea, and ICAO/IATA for air transport.

Transport method

14.1 Land: Transport by road: ADR 2007, Transport by rail: RID

UN no.: 2031 Class: 8 Packaging group: II
Labels: 8 Hazard number: 80

Transport documentation: Consignment note and written instructions

14.2 Sea: Transport by ship: IMDG 33-06

UN no.: 2031 Class: 8
Packaging group: II Labels: 8
FEm – Emergency sheets (F – Fire, S – Spills): F-A,S-B
Sea pollutant (PP – Strong sea pollutant, P – Sea pollutant):

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Transport documentation: Bill of lading

14.3 Air: Transport by plane: IATA/ICAO

UN no.: 2031 Class: 8 Packaging group: II
Labels: 8

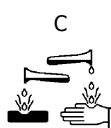
Transport document: Airway bill

15. REGULATORY INFORMATION.

Symbols:



Oxidizing



Corrosive

R Phrases:

R8 Contact with combustible material may cause fire.
R35 Causes severe burns.

S phrases:

S23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36 Wear suitable protective clothing.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S1/2 Keep locked up and out of the reach of children.

16. OTHER INFORMATION.

Complete text of the R phrases that appear in section 3:

R8 Contact with combustible material may cause fire.
R35 Causes severe burns.

The information given in this Safety Data Sheet has been drafted in accordance with REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.