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PRODUCT SAFETY DATA SHEET

Product : **ACQUA RAGIA MINERALE (WHITE SPIRIT)**
Product code : 00601

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Date : 12/12/2002

Version : 1,02

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

Identification of the substance or

preparation:

Type of product and use:

Manufacturer:

Emergency telephone number (Italy):

ACQUA RAGIA MINERALE.

Solvent, reagent, diluent

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2. Composition/Information on Ingredients.

Components:

Hazardous components:

Complex mixture of hydrocarbons, with distillation range 150 - 200 °C

Naphtha (petroleum), hydrodesulfurized heavy 100 %wt (CAS 84742-62-1, EINECS 205-185-4; Xn, N; R 10-51/53-55-66)

This product contains < 0.1 % wt benzene (note J - Dir. 94/89/CE)

3. Hazards identification.

Important hazards:

This product is flammable, with fire hazard. The vapours are flammable and form explosive mixtures with air (also in empty drums or containers that have not been cleaned).

The vapours are heavier than air and will accumulate in closed areas and at ground level, with backfire hazard.

Overexposure to vapours (e.g. through prolonged use in confined spaces) may cause eye and respiratory tract irritation, dizziness and nausea.

Prolonged and repeated skin contact, especially if hygiene practices are poor, may cause reddening, irritation and dermatitis, due to a defatting effect.

For all low-viscosity petroleum products (less than 7 mm²/s at 40 °C), there is the risk of aspiration into the lungs. This may occur directly after ingestion, or subsequently in case of vomiting (spontaneous or induced).

In this case there is the possibility of an inflammation of the lung tissues (chemical pneumonitis). This is a serious condition requiring medical treatment.

For this reason, according to Dir. 96/54/CE, the EU requires this product to be labelled as "Harmful" with risk phrase R 65 ("Harmful: may cause lung damage if swallowed") in order to point out this special risk.

For the real toxicological properties of this product, see Sect. 11.

See Sect. 12 of this sheet.

Environmental hazards:

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4. First-aid measures.

Skin contact:	Take off contaminated clothing and shoes (beware: fire hazard). Wash skin thoroughly with soap and water. Do not re-use clothes, if they are still contaminated.
Eye contact:	Rinse eyes thoroughly for at least 10 minutes. Keep eyelids well apart. If inflammation or irritation persists, seek medical advice.
Irrigation:	Do not induce vomiting to avoid aspiration into the lungs: seek medical attention.
Aspiration of liquid into the lungs:	If there is the possibility that the product has been aspirated into the lungs (i.e. in case of spontaneous vomiting), transport the victim to a hospital.
Inhalation:	In case of overexposure to vapours, remove from exposure to fresh air. Keep at rest and call for medical assistance. If respiration has stopped, use artificial respiration; in case of cardiac arrest, use cardiac massage.

5. Fire-fighting measures.

Extinguishing media:	Carbon dioxide, dry chemicals, foam, water spray (fog).
- Suitable:	Do not use water jets. They could cause splashing, and spread the fire.
- Not to be used:	Use water sprays to cool the surfaces exposed to the flames.
Other information:	Spilled product which is not burning should be covered with sand or foam.
Special protective equipment for firefighters:	Wear a suitable breathing apparatus if smoke is present.
Useful precautions:	Avoid accidental sprays on hot surfaces or electrical contacts. In case of leaks, take into account that the lower explosion limit is about 1 % vol.

6. Accidental release measures.

General measures:	Shut off source of spill, if possible. Do not let the product flow into sewers, water courses or underground spaces. Eliminate sources of ignition. If necessary, ventilate confined areas.
Methods for cleaning up:	
- On soil:	Contain spilled liquid with sand, earth or other suitable absorbents. Recover free liquid in suitable containers. Clean contaminated area. Dispose of according to local regulations.
- On water:	Confine the spillage. Remove from surface by skimming or suitable absorbents. Notify local authorities according to regulations.

7. Handling and storage.

Storage:	Storage temperature: ambient to 50°C max.
Handling:	Store the product in cool, well ventilated surroundings. Keep away from sources of ignition.
Other information:	During transfer and mixing operations, ensure that all equipment is correctly grounded. Avoid the build-up of electric charges.

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8. Exposure controls/personal protection.

Exposure limits:	TLV-TWA (A.C.G.I.H. 2002): 100 ppm - 525 mg/m ³ (white spirit)
Personal protection:	The association ESIG (European Solvent Industry Group) advises for this product a TLV-TWA of 350 mg/m ³ . This limit must not replace other limits set by the National Health authorities or agreed upon by the parties.
- Open spaces:	No special measures
- Confined spaces:	Ensure adequate ventilation, in order to avoid the build-up of an excessive concentration of vapours. If necessary, use a self-contained breathing apparatus.
Hand/eyes/skin protection:	Safety goggles, solvent-proof gloves, overalls. Gloves must be felt-lined.
Hygiene measures:	Do not breathe vapours or mists. Avoid contact with skin and eyes. Do not drink, eat or smoke with dirty hands. Change clothes if they are dirty or soaked, and in any case at the end of the working shift. Wash hands before going to the toilet. Wash hands with water and soap, do not use solvents or other irritant products which have a defatting effect on the skin.

9. Physical and chemical properties (typical values).

Appearance:	Liquid, bright & clear (ASTM D 4176/1).
Odour:	Typical
Colour:	+ 30 (ASTM D 158)
Density at 15°C:	780 kg/m ³ (ASTM D 1286).
Vapour pressure:	20 mbar / 20 °C (ASTM D 4853).
Boiling point/range:	150 - 200 °C (ASTM D 86)
Viscosity at 40°C:	< 7 mm ² /s (ASTM D 445)
Solubility in water:	Insoluble in water
pH :	Not applicable (ASTM D 1287).
Flash point :	40 °C (ASTM D 58)
Auto-ignition temperature:	> 200 °C. (DIN 51794)
Explosion limits:	
- Lower:	1 (% vol).
- Upper:	6 (% vol).
Partition coefficient (P _{ow}):	Not determined.

10. Stability and reactivity.

Thermal decomposition products:	CO ₂ , HC
Stability:	Stable product.
Hazardous reactions:	None

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Materials to avoid: Strong oxidants

11. Toxicological information.

Oral toxicity (rat):	LD50 greater than 2000 mg/kg
Dermal toxicity (rabbit):	LD50 greater than 2000 mg/kg
Inhalation toxicity (rat):	LC50 greater than 20 mg/4h
Other informations:	* In case of repeated / prolonged contact this product may cause irritation to skin. A prolonged exposition may cause irritation to the eyes and upper airways.
Chronic toxicity:	This product does not contain significant amounts of benzene (in any case, < 0.1 % wt). According to the criteria laid out by the EU (note J, Annex I dir. 94/69/CE - 21 ° ATP dir. 67/548/CEE), this product must be regarded as non carcinogenic.

12. Ecological information.

General informations:	No specific environmental data are available for this product. According to the components, and by comparison with other products of the same type and composition, it is expected that this product has a toxicity for aquatic organisms between 1 and 10 mg/l, and must be regarded as "Dangerous to the environment" Handle according to general working hygiene practices to avoid pollution and release into the environment.
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13. Disposal considerations.

Disposal of product:	Do not dispose of the product, either new or used, by discharging into sewers, tunnels, lakes or water courses. Deliver to a qualified official collector.
European Waste Catalogue Code:	According to the use, this product can be classified with different codes, e.g. in group 07 and 14 (Ref: 2001/118/CE). It is not possible to give a general classification.
Disposal of packaging:	The product as it is does not contain halogenated substances Dispose of in a safe manner, in accordance with local regulations. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been cleaned, and declared safe.

14. Transport information.

International denomination:	"TURPENTINE SUBSTITUTE"
Substance identification number. (UN Nr.):	1300.
RID/ADR:	Class/Packing Gr.: 3 / III KEMLER Nr: 30 Label: 3
ICAO/IATA:	Class: 3 Pack. Group: III Label: 3
IMO-IMDG code:	Class: 3 Packaging group: III Label: 3 EmS: 3-07. MARINE POLLUTANT

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This Safety Data Sheet has been checked and printed on 15/12/2002.

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