

Chacón e Hijos, Troquelados, S.A.

MATERIAL SAFETY DATA SHEET (MSDS) (91/155/CEE; 93/112/CEE)

RADIKAL-40 BLUE

Update 3 of 20/05/05 Replace the update 2 of 17/12/04

1. Product identification

RADIKAL-40 BLUE

Dry chemical powder for fire extinguishers AB and C

Company:

CHACÓN E HIJOS, TROQUELADOS, S.A.

Cno. Los Pinos, 39 30570 Beniaján MURCIA (Spain) Tlph +34-968 821 188 Fax +34-968 824 742

Emergency information +34-968 821 188

2. Composition/information on ingredients

Chemical common name№ de CASMonoammonium phosphate monobasic7722-76-1Ammonium sulphate7783-20-2Amorphous silica68611-44-9Polymethilhidrogensiloxane72319-10-9Blue pigment147-14-8

3. Hazards identification

Some ingredients are classified as "nuisance dust". As with any dusts,

4. First aids measures

Inhalation:

Remove to fresh air.

Eye contact:

Flush eyes with plenty of water. If trouble persist, get medical attention.

Skin contact:

Flush skin with plenty of water and soap.

Ingestion:

Never induce vomiting. Rinse the mouth with water. If necessary, get

medical attention.

5. Fire fighting measures

This product is a fire extinguishing agent.

Special information:

Low risk. Must avoid inhalation of the product of decomposition.

6. Accidental release measures

Individual precautions:

Personal Protective Equipment and Clothing must be used:

Keep out quickly any incompatible material: alkalis or caustics.

Cleaning methods:

Wipe off the powder and put in a suitable container.

7. Handling and storage

Handling:

If necessary:

Local or generic ventilation,

Handle with care and avoid dust generation,

Avoid electrostatic charges accumulation

Storage:

Keep closed in the original container Keep dry at ambient temperature

Keep apart of alkalis

Observe all local warnings and precautions for storage

N.A.: not applicable N.D.: not defining Page 1 of 3



Chacón e Hijos, Troquelados, S.A.

MATERIAL SAFETY DATA SHEET (MSDS) (91/155/CEE; 93/112/CEE)

RADIKAL-40 BLUE

Update 3 of 20/05/05 Replace the update 2 of 17/12/04

8. Exposure controls/Personal protection

Exposure limits:

Non established specific TLV. As a guide:

TLV/TWA: 10 mg/m³ STEL: N.D. PEL: N.D.

Respiratory protection:

For conditions of use where exposure to the dust or mist is over the

limits, a half-face dust respirator may be worn.

Skin and hands protection:

Make use of gloves
Make use of shirt
Make use of work-boots

Eye protection:

Use chemical safety goggles.

9. Physical and chemical properties

Appearance: blue free flow powder

Odour: odourless

pH value: (0.1% aq) 4.5-6.0 Boiling point: up to 190°C Melting point: >190°C Flash point: N.A. Flammability: N.A.

Relative density: 1.65-1.85 Solubility: non soluble in water Thermal decomposition: 190°C Apparent density: 0.85-0.98 g/cm³

Vapour pressure: N.A. Evaporation rate: N.A.

10. Stability and reactivity

Conditions to avoid:

From 190° begin to loss ammonia forming phosphorous pentoxide.

Stability:

Stable at normal temperature and pressure(see section 9)

Material to avoid:

Alkalis

Strong oxidizing agents.

Aluminium. Lead Magnesium

Methaneamine Sodium hypochlorite

Steel Nitric salts

Potassium chlorate

Hazardous decomposition products:

Ammonia.

11. Toxicological information

Powdery material.

Primary irritating effect:

Skin irritation

Irritating minor.

Mucous irritation

N.A.: not applicable N.D.: not defining Page 2 of 3



Chacón e Hijos, Troquelados, S.A.

MATERIAL SAFETY DATA SHEET (MSDS) (91/155/CEE; 93/112/CEE)

RADIKAL-40 BLUE

Update 3 of 20/05/05 Replace the update 2 of 17/12/04

Irritating of eyes

Human experiences:

There is no evidences of silicosis or another illness of the respiratory

tract.

Test in the long run:

No negative effect found

12. Ecological information

Biodegradability:

N.A.

Ecotoxicity test EC₅₀ at 15' (Equitox/m³): Photobacterium Phosphoreum

 $EC_{50}=18.5$ Equitox/m³

Aquatic toxicity:

Fish severe toxicity: NOEC (96h) >= 500000 mg/L (bibliography) Daphnia severe toxicity: NOEC (24h) >= 500000 mg/L (bibliography)

13. Disposal considerations

Product::

Dispose of waste according to applicable local, state, and federal

regulations.

Packaging:

Dispose of waste according to applicable local, state, and federal

regulations.

14. Transport information

UN number: not assigned

Packing group: none

Overland transport:

TPC/TPF: not restricted ADR/RID: not restricted

Transport by see:

IMDG/IMO: not restricted

Air transport:

ICAO/IATA: not restricted

15. Regulatory information

Risks symbol: N.A.
Risks phrases: N.A.
Security phrases: N.A.

16. Other information

Applications of the product:

Must be used only and exclusively as fire extinguishing media

for A, B and C fires.

The information which appears in this document is, according to our knowledge, actual, true and right, but any of the recommendations or suggestion here described are out of any guarantee, since the conditions of product handling are out of our control. Besides, Chacón E Hijos Troquelados, S.A. does not assume the responsibility that the contents of this sheet can be interpreted as a recommendation for the handling of any product violating the Law, security practice or patents in vigour on any matter or its use.

N.A.: not applicable N.D.: not defining Page 3 of 3