



SAFETY DATA SHEET

Regulation CE 1907/2006

Rev.: 002 of 11/02/14

Date of Issue: 24/10/11

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1. Substance and company's identification

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Commercial name: **QFIRE**

Use of the substance or preparation:

Fire extinguishing powder for fires ABC and E (in the presence of electric current).

Company's identification:

QUIMICA 21, S.L.

Poligono Industrial Puente Alto, Calle N, nº 2, 4 y 6

03300 Orihuela (Alicante) – SPAIN

Telephone: (+34) 966 742 380

Fax: (+34) 966 742 372

Competent Technician : laboratorio@quimica21.es

Emergency information: (+34) 966 742 380, available during working time (09-14; 16-19)

2. Hazards Identification

No registered hazards

Hazards Marking:

Following available data, it's not a hazardous product according to the Directive 67/548/CEE and the regulation (CE) Nº 1272/2008.

3. Composition/content information

Goods designation: mix of substances

<u>Usual Chemical Name</u>	<u>CAS Number</u>	<u>Nº EINECS</u>	<u>Nº REACH</u>
Mono ammonium phosphate	7722-76-1	231-764-5	01-2119488166-29
Ammonium sulphate	7783-20-2	231-984-1	01-2119455044-46

4. First Aids

General notes:

In case of accident or discomfort call a doctor and in case of unconsciousness do not provide anything orally.

On inhalation:

In case of powder release from the product there may appear some annoyances such as coughs or sneezes.

Eventually bring the person outdoors.

On contact with eyes:

Possible trouble due to foreign bodies.

Wash the open eyelid thoroughly with water.

In case of persistent trouble, contact the Oculist.

On contact with skin:

Wash with water and soap.

On ingestion:

Thoroughly wash the mouth and drink water. Request medical assistance if necessary.

5. Fire fighting measures

Adequate extinguishing media:

No specific measures are required since this product is an extinguishing agent.

Extinguishing medias which must not be used for safety reasons: N.A.

Special risk due to the substance, its combustion by-products or released gases:

Low risk. The product should not be inhaled either its by-products of decomposition.

Special protective equipment for fire-fighters:

In case of fire, wear self-contained breathing apparatus and full protective clothing.

6. Accidental release measures

Individual precautions:

Personal protection equipment advisable: Anti-dust face mask.

Keep away from any incompatible material such as alkaline compounds or caustic products.

N. A.: not applicable

N. D.: not defined



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Precautions for environment protection:

Avoid contamination of drainages channels, superficial waters and groundwaters.

Cleaning methods:

Gather mechanically and put it into an adequate recipient. Remove remains with water.

7. Handling and storage

Handling:

If necessary:

Local or general ventilation.

Handle with care avoiding dust generation.

Use appropriate personal protection equipment.

Storage:

Keep, if possible, in the original packing and closed.

Keep in a dry place and at ambient temperature.

Avoid accumulation of electrostatic charges.

Keep away from alkali compounds.

Specific uses:

Fire extinguishing powder for fires ABC and E (in the presence of electric current).

8. Exposition controls/ personal protection

Exposition limits:

No specific TLV established for the product. Following data can be applied as a guide:

TLV/TWA: 10 mg/m³, total powder (ACGIH ^92/^93)

STEL: N.D.

PEL: N.D.

Expositions controls:

Individual protection measures:

Respiratory protection :

In case that limits concerning working place are exceeded, use anti-dust face-masks.

Note national regulations.

Hands protection:

Use protective gloves.

Skin protection:

Use long-sleeved shirts.

Use security shoes.

Eyes protection:

Use security glasses whether closed or with side protection.

Environmental Protection

See section 6

9. Physical and chemical properties

General information:

Appearance: free flow solid powder.

Colour: several.

Odour: odourless.

Important information about health, safety and environmental

Value pH : (1% aqueous) 4.4-6.0

Boiling point: N.D.

Flash Point: N.A.

Inflammability: N. A.

Explosive properties: N. A.

Combustion properties: N. A.

Vapour pressure: N. A.

Relative density: 1.65-1.85

Solubility: N.A.

Solubility in water: N.D.

N. A.: not applicable

N. D.: not defined



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<p><i>Distribution coefficient (n- octane/water):</i> N.A.</p> <p><i>Viscosity:</i> N.A.</p> <p><i>Density of vapour:</i> N.A.</p> <p><i>Velocity of evaporation:</i> N.A</p> <p><i>Others data:</i></p> <p>There is no additional relevant information.</p>
<p>10. Stability and reactivity</p> <p>Stable at normal temperature and pressure (see Paragraph 9).</p> <p><i>Conditions to be avoided:</i></p> <p>From 190°C it loses ammonia molecules finally providing phosphorus pentoxide.</p> <p><i>Materials to be avoid:</i></p> <p>It may release ammonia when in touch with alkali compounds.</p> <p>Avoid strong oxidising agents.</p> <p>Aluminium: may corrode.</p> <p>Lead: may corrode.</p> <p>Magnesium: may evolve ammonia.</p> <p>Methenamine: evolves formaldehyde, highly toxic.</p> <p>Sodium hypochlorite (bleach): decomposes on contact with toxic gas .</p> <p>Steel: may corrode</p> <p>Nitrite salts: violent explosion if melted.</p> <p>Potassium chlorate: violent reaction.</p> <p><i>Hazardous decomposition products:</i></p> <p>Ammonia.</p>
<p>11. Toxicological information</p> <p>Powdery material.</p> <p><i>Primary irritant effect on the skin:</i> slightly irritant</p> <p><i>Primary irritant effect on the eyes:</i> slightly irritant</p> <p><i>Experiences in humans:</i></p> <p>No silicosis or other specific respiratory diseases have been observed while handling this product.</p> <p><i>Long term tests:</i></p> <p>No negative effects observed.</p> <p>No irreversible alterations either evidences of silicosis, have been observed after performing tests concerning the possibility of chronic toxicity by inhalation (see Paragraph 8).</p>
<p>12. Ecological information</p> <p><i>Ecotoxicity test EC₅₀ after 15' (mg/ml):</i> Photobacterium Phosphoreum</p> <p>34800 < EC₅₀ < 54200</p> <p><i>Mobility:</i> N. D.</p> <p><i>Absorption/Desorption:</i> N.D.</p> <p><i>Persistence and degradability:</i> N.A.</p> <p><i>Bioaccumulation potential:</i> N.A.</p> <p><i>Results of PBT assessment:</i> N. A.</p> <p><i>Other negative effects:</i></p> <p><i>Aquatic toxicity :</i></p> <p>Acute toxicity in fishes: NOEC (96h) >= 500000 mg/L (bibliography)</p> <p>Acute toxicity in Daphnias: NOEC (24h) >= 500000 mg/L (bibliography)</p> <p><i>Destruction of the ozone layer:</i> N.A.</p> <p><i>Photochemical ozone creation Potential:</i> N.A.</p> <p><i>Global warming potential:</i> N.A.</p>

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13. Disposal considerations

Product:

It can be stored in controlled waste disposals, meeting necessary technical requirements, after having contacted person concerned for disposal and appropriate authorities.

Packaging:

It can be disposed with household waste.

Waste codes should be assigned by the user based on the application for which the product is employed. Follow the Community, national, regional or local regulations.

14. Transport information

ONU number: not assigned

Packing group: none

Road and rail transport:

TPC/TPF: not restricted

ADR/RID: not restricted

Maritime transport:

IMDG/IMO: not restricted

Air transport:

ICAO/IATA: not restricted

15. Regulatory information

Based on the data we have, is not a dangerous substance according to Directive 67/548/CEE and Regulation (CE) N° 1272/2008.

There has been no evaluation of chemical safety.

Hazard Symbols: N. A.

Risk Phrases: N. A.

Safety Phrases: N. A.

Water Law: The discharge of wastewater containing phosphorus is regulated by law.

16. Other information

All the information shown in this document is, according to the Company's knowledge, true and correct

End of document.

N. A.: not applicable

N. D.: not defined



EXTINGUISHING AGENTS- ABC EXTING. POWDER

QFIRE												
Main Components	Mono Ammonium Phosphate and Ammonium Sulphate											
MAP Content	%	10	20	30	40	50	55	60	70	75	80	90
Bulk Density (*)	g/ml	0,84-0,98	0,84-0,98	0,84-0,98	0,84-0,98	0,84-0,98	0,84-0,98	0,84-0,98	0,84-0,98	0,84-0,98	0,84-0,98	0,84-0,98
Sieve Analysis (*) Retained on 125 µm Retained on 63 µm Retained on 40 µm	%	15-25 22-38 12-28	15-25 22-38 12-28	15-25 22-38 12-28	15-25 22-38 12-28	15-25 22-38 12-28	15-25 22-38 12-28	15-25 22-38 12-28	15-25 22-38 12-28	15-25 22-38 12-28	15-25 22-38 12-28	15-25 22-38 12-28
Moisture Content (*)	%	≤0,25	≤0,25	≤0,25	≤0,25	≤0,25	≤0,25	≤0,25	≤0,25	≤0,25	≤0,25	≤0,25
Water Repellency (*)		Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive
Resistance to Caking and Lumping (*)		Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive
Fluidity	g/s	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thermal Stability From: To:	°C	-60 +85	-60 +85	-60 +85	-60 +85	-60 +85	-60 +85	-60 +85	-60 +85	-60 +85	-60 +85	-60 +85

(*) All the products are manufactured according to the European Standard UNE-EN 615:2009

Physical Risks: No toxicological hazards, neither during handling nor during the application of the extinguisher. (Ecotoxicity Test EC₅₀)

Durability: Products' durability is guaranteed for at least 5 years, while no change or deformation in its properties, occur and as long as manufacturer's instructions concerning handling and storage are followed.

QUIMICA 21, S.L. reserves its right for any possible modification.