

SAFETY DATA SHEET FIRE EXTINGUISHER

Issued on 16/07/2014 - Rev. no. 4 of 05/12/2017

Compliant with regulation (EU) 2015/830

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Cod. 99.652A.MSDS.GBA

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: FIRE EXTINGUISHER (1 kg stored pressure ABC powder – A32/ABC)
Model: PS1-X ABC

1.2. Relevant identified uses of the substance or mixture and uses advised against

Powder fire extinguisher
Areas of use: Consumer uses[SU21], Professional uses[SU22]
Uses advised against: Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

ANAF FIRE PROTECTION
Via del Commercio, 4
27020 Torre d'Isola
Tel. 0039 (0)382 45 33
Fax: 0039 (0)382 92 02 79
e-mail: info@anaf.eu
Internet: www.anaf.eu

1.4. Emergency telephone number

Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department.
The attending doctor or medical professional can call NPIS – National Poisons Information Service.

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification pursuant to Regulation (EC) No. 1272/2008:

This product does not meet the criteria for classification in any hazard class in compliance with Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures.

Pictograms: None.

Class codes and hazard category: Not hazardous

Hazard statements codes: Not hazardous

2.2. Label elements

Labelling compliant with regulation (EC) no. 1272/2008:

Pictograms, warning codes: None.

Hazard statement codes: Not hazardous

Supplemental hazard statement codes: not applicable

Precautionary statements:
General

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P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.

2.3. Other hazards

The substance/mixture does NOT contain PBT/vPvB substances according to Regulation (EC) 1907/2006, annex XIII
No information on other hazards

SECTION 3. Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Substance	Concentration	Classification	Identifiers
HELIUM	(Propellant)	Comp. Gas, H280 (GHS04)	CE 231-168-5 CAS 7440-59-7 EINECS - REACH -
AMMONIUM SULPHATE a substance for which there are Community occupational exposure limits	> 50 <= 75%	No classification	CE - CAS 7783-20-2 EINECS 231-984-1 REACH 01-2119455044-46
MONOAMMONIUM PHOSPHATE	> 20 <= 30%	No classification	CE - CAS 7722-76-1 EINECS 231-764-5 REACH 01-2119488166-29

SECTION 4. First aid measures

4.1. Description of first aid measures

- Inhalation: Powder spillage may result in irritation, with coughing or sneezing. Immediately remove the patient from the contaminated environment and keep him/her resting in a well-ventilated area. If the affected person feels unwell, seek medical advice.
- Direct contact with skin (of the pure product): Wash with plenty of water and soap.
- Direct contact with eyes (of the pure product): Immediately wash with plenty of water for at least 10 minutes.
- Ingestion: Do not induce vomiting or emesis. Immediately seek medical treatment.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

IN CASE OF INGESTION accompanied by illness: contact a POISON CONTROL CENTRE or a doctor.

IN CASE of exposure or possible exposure, seek medical advice.

In case of irritation or skin rash: seek medical advice.

In case of respiratory symptoms: contact a POISON CONTROL CENTRE or a doctor.

If the affected person feels unwell, seek medical advice.

SECTION 5. Fire fighting measures

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5.1. Extinguishing media

The preparation itself is an extinguishing agent for class ABC or BC fires, depending on the model.

5.2. Special hazards arising from the substance or mixture

Pressurised product in a sealed metal container.

5.3. Advice for firefighters

Specific firefighting methods: open doors and windows in the room for maximum ventilation. Avoid breathing vapours (toxic). Put oneself in the direction of the wind, in relation to the fire.

Pour cold water on recipients exposed to flames until the fire has been extinguished.

Special fire fighting protection: in the presence of vapours, use self-contained breathing apparatus. Dispose of the fire and contaminated water residues as required by official standards.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:

Wear safety gloves and protective clothing.

6.1.2 For emergency responders:

Wear safety gloves and protective clothing.

Remove all open flames and any possible sources of ignition. Do not smoke.

Provide sufficient ventilation.

Evacuate the danger area and, if necessary, consult an expert.

6.2. Environmental precautions

Dispose of the residue in compliance with applicable regulations.

6.3. Methods and material for containment and cleaning up

6.3.1 For containment: Collect the product for re-use, if possible, or for disposal.

6.3.2 For cleaning up: After collection, wash the area and the materials involved.

6.3.3 Other information: None in particular.

6.4. Reference to other sections

See sections 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact and inhalation of vapours.

Pressurised recipient.

Do not puncture or burn, not even after use.

Also see the following section 8.

7.2. Conditions for safe storage, including any incompatibilities

Keep the containers in a vertical and safe position, avoiding the possibility of falls or shocks.

Pressurised recipient.

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Specific end use(s)

Polyvalent powder fire extinguishers approved for extinguishing fires as an extinguishing agent of class ABC or BC fires, depending on the model.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Related to the substances contained:

AMMONIUM SULPHATE

TLV-TWA=10mg/m³ (inhalable fraction, OEL(IT))

TLV-TWA=3mg/m³ (breathable fraction, OEL(IT))

- Substance: AMMONIUM SULPHATE

DNEL

Systemic effects Long exposure Workers Inhalation = 11.2 (mg/m³)

Systemic effects Long exposure Workers Dermal = 42.67 (mg/kg bw/day)

Systemic effects Long exposure Consumers Inhalation = 1.7 (mg/m³)

Systemic effects Long exposure Consumers Dermal = 12.8 (mg/kg bw/day)

Systemic effects Long exposure Consumers Oral = 6.4 (mg/kg bw/day)

PNEC

Fresh water = 0.312 (mg/l)

Sediment Fresh water = 0.063 (mg/kg/Sediment)

Marine water = 0.0312 (mg/l)

Intermittent emissions = 0.53 (mg/l)

STP = 16.2 (mg/l)

Soil = 62.6 (mg/kg Soil)

- Substance: MONOAMMONIUM PHOSPHATE

DNEL

Systemic effects Long exposure Workers Inhalation = 6.1 (mg/m³)

Systemic effects Long exposure Workers Dermal = 34.7 (mg/kg bw/day)

Systemic effects Long exposure Consumers Inhalation = 1.8 (mg/m³)

Systemic effects Long exposure Consumers Dermal = 20.8 (mg/kg bw/day)

Systemic effects Long exposure Consumers Oral = 2.1 (mg/kg bw/day)

PNEC

Fresh water = 1.7 (mg/l)

Marine water = 0.17 (mg/l)

Intermittent emissions = 17 (mg/l)

8.2. Exposure controls

Appropriate engineering controls:

Hygiene controls: Avoid high concentrations of powder and calibrate ventilation where necessary.

Do not eat, do not drink and do not smoke when handling. Wash hands after handling the product and before eating, drinking or smoking.

Observe the usual safety measures when handling chemicals.

Individual protection measures:

a) Eye/face protection: Not required for normal use.

b) Skin protection

i) Hand protection: Not required for normal use.

ii) Other: Wear normal work clothes

c) Respiratory protection: Not required for normal use.

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d) Thermal hazards: No hazard to be reported

Environmental exposure controls: Use good working practices, avoiding release into the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

The following information refers to extinguishing powder.

Physical and chemical properties	Value
Appearance	Fine powder contained in a tank
Odour	Odourless
Odour threshold	Not applicable
pH	4.5-6.0 (0.1% in H ₂ O)
Melting point/freezing point	>190°C
Initial boiling point and boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability (solid, gas)	Not flammable
Upper/lower flammability or explosive limits	Not applicable
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	1.65-1.85g/cm ³ (apparent 0.82-0.96 g/cm ³)
Solubility	Not determined
Water solubility	Partially water-soluble
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature	Not applicable
Decomposition temperature	190°C
Viscosity	Not applicable
Explosive properties	Not explosive
Oxidising properties	Not determined

9.2. Other information

No data available.

SECTION 10. Stability and reactivity

10.1. Reactivity

No risk of reactivity.

10.2. Chemical stability

No hazardous reaction if handled and stored in accordance with the provisions.

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10.3. Possibility of hazardous reactions

When it reaches temperatures above 190°C, it decomposes dispersing ammonia.
Contamination with incompatible materials.

10.4. Conditions to avoid

Shocks or permanent deformations.
Storage at a temperature outside -30°C / +60°C.
Contained heating. For heating above 190°C, it decomposes producing gas.
Welding or heating works in equipment or systems that may contain product residues.

10.5. Incompatible materials

Alkalis, strong acids.
Strong oxidisers (chlorates, nitrates and nitrites) and bases.

10.6. Hazardous decomposition products

When it reacts with strong bases it disperses ammonia. See sections 2 and 9. When it is strongly heated it decomposes releasing toxic gases (e.g. NO_x, ammonia, SO₃ and SO₂). When it is in contact with alkaline materials such as lime or caustic soda it can produce ammonia gas.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

ATE(mix) oral = ∞
ATE(mix) dermal = ∞
ATE(mix) inhal = ∞

- (a) acute toxicity: based on available data, the classification criteria are not met.
- (b) skin corrosion/irritation: based on available data, the classification criteria are not met.
- (c) serious eye damage/irritation: based on available data, the classification criteria are not met.
- (d) respiratory or skin sensitisation: based on available data, the classification criteria are not met.
- (e) germ cell mutagenicity: based on available data, the classification criteria are not met.
- (f) carcinogenicity: AMMONIUM SULPHATE: NOAEL = 284 mg/bw kg/day
- (g) reproductive toxicity: AMMONIUM SULPHATE: NOAEL = 1500mg/bw kg/day
MONOAMMONIUM PHOSPHATE: NOAEL ≥1500mg/bw kg /day
- (h) specific target organ toxicity (STOT) single exposure: based on available data, the classification criteria are not met.
- (i) specific target organ toxicity (STOT) repeated exposure: based on available data, the classification criteria are not met.
- (j) aspiration hazard: based on available data, the classification criteria are not met.

Related to the substances contained:

AMMONIUM SULPHATE:

LD50 Oral (rat) (bodyweight mg/kg) = 4250

LD50 Cutaneous (rat or rabbit) (bodyweight mg/kg) = 2001

CL50 Inhalation (rat) of vapour/dust/aerosol/smoke (mg/1/4h) or gas (ppmV/4h) = 1001

MONOAMMONIUM PHOSPHATE:

NOAEL = 250mg/bw kg /day

LD50 Oral (rat) (bodyweight mg/kg) = 5750

LD50 Cutaneous (rat or rabbit) (bodyweight mg/kg) = 7940

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SECTION 12. Ecological information

12.1. Toxicity

Related to the substances contained:

AMMONIUM SULPHATE:

Acute toxicity:

LC50 = 53mg/L (fish, *Oncorhynchus mykiss*, 96h)CE50 = 129mg/L (Invertebrate, *Daphnia magna*, 48h)CE50 = 2700mg/L (Algae, *Chlorella vulgaris*, 18d)

CE50 = 1618mg/L (microorganisms, 0,5h)

MONOAMMONIUM PHOSPHATE:

Acute toxicity:

LC50 = 155mg/L (fish, *Pimephales promelas*, 96h)

Use good working practices, avoiding release into the environment.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

Related to the substances contained:

MONOAMMONIUM PHOSPHATE:

Non-bioaccumulative

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substance/mixture does NOT contain PBT/vPvB substances according to Regulation (EC) 1907/2006, annex XIII

12.6. Other adverse effects

Soil bacteria convert ammonia into nitrate, which can be absorbed by plants or denitrified by microorganisms into nitrogen and nitrous oxide. In water, ammonium and phosphate ions can cause eutrophication, hence an increase in algae growth. The decomposition of algae can reduce oxygen which, if substantial, could cause asphyxiation of other aquatic organisms.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

The residues must be disposed of in compliance with the regulations in force by delivering the empty containers to an authorised disposal company that is equipped to safely handle the pressurised containers containing residual liquids and gases.

Operate according to current local or national regulations

SECTION 14. Transport information

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14.1. UN number

UN 1044

14.2. UN proper shipping name

FIRE
EXTINGUISHERS

14.3. Transport hazard class(es)

2.2

14.4. Packing group

N.A.

14.5. Environmental hazards

N.A.

14.6. Special precautions for user

For road transport only, according to Special Provision 594 the objects transported are not subject to the requirements of ADR.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk is not foreseen

SECTION 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) no. 1907/2006 (REACH), Regulation (EC) no.1272/2008 (CLP), Regulation (EC) no. 830/2015 (Requirements for the compilation of safety data sheets), Regulation (EC) no. 790/2009.

15.2. Chemical safety assessment

No chemical safety assessment was carried out.

SECTION 16. Other information

16.1. Other information

Classification based on data from all components of the mixture

Regulatory references:

Regulation 1907/2006 EC as amended

Regulation 1272/2008 EC as amended

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Regulation 830/2015 EC

Bibliographical sources:

SAX 12 Ed Van Nostrand Reinhold

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ECHA: European Chemicals Agency

OSHA: European Agency for Safety and Health at Work

IARC: International Agency for Research on Cancer

IPCS: International Programme on Chemical Safety (Cards)

NIOSH: Registry of toxic effects of chemical substances (1983)

ACGIH: American Conference of Governmental Industrial Hygienists

TOXNET: Toxicology Data Network

WHO: World Health Organization

CheLIST: Chemical Lists Information System

Acronyms:

- ACGIH: American Conference of Governmental Industrial Hygienists
- ADR: Accord Européen Relatif au Transport International des Marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- CLP: Classification, Labelling and Packaging
- CSR: Chemical Safety Report
- DNEL: Derived No Effect Level
- EC Effective Concentration
- IATA International Air Transport Association
- IMDG International Maritime Dangerous Goods
- LC Lethal Concentration
- LD Lethal Dose
- PBT: Persistent, Bioaccumulative and Toxic
- PNEC: Predicted No Effect Concentration
- STEL: Short Term Exposure Limit
- SVHC: Substance of Very High Concern
- TLV: Threshold Limit Value
- TWA: Time Weighted Average
- vPvB: very Persistent, very Bioaccumulative and toxic

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NOTICE TO USERS:

The information provided in this sheet is based on our knowledge at the date of its compilation relating to the requirements for safety, health, environmental protections and correct use of the product.

The user must keep in mind the possible risks related to use of the product other than that for which it was supplied.

The sheet does not in any way exempt the user from the knowledge and application of the set of regulations relevant to his/her activity.

The set of regulatory requirements mentioned above is simply intended to help the recipient fulfil his/her obligations while using the dangerous product.

The sheet does not exonerate the user from making sure he/she does not have obligations other than those mentioned and regulating the possession and use of the product for which he/she is solely responsible.

*** This sheet supersedes all previous editions.

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