

SAFETY DATA SHEET

Section 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name or designation of the mixture ABC 40

Registration number -

Synonyms None.

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

Identified uses Firefighting Powder for use on Class A, B, C and E fires.

Uses advised against None known.

Details of the supplier of the safety data sheet

Supplier

Company name Kerr Fire Fighting Chemicals

Address Ashcroft Road
Knowsley Industrial Park
Kirkby, Liverpool, L33 7TS

Telephone: 0044 (0)15 1548 6424

Fax: 0044 (0)15 1548 7263

e-mail kerr.sales@kerr-firefighting.com

Contact person EH&S Manager

Emergency telephone number 0044 (0)15 2426 1166

Section 2: Hazards identification

Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

This preparation does not meet the criteria for classification according to Directive 1999/45/EC as amended.

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

Hazard summary

Physical hazards Not classified for physical hazards.

Health hazards Not classified for health hazards.

Environmental hazards Not classified for hazards to the environment.

Specific hazards Dusts may irritate the respiratory tract, skin and eyes. Prolonged and repeated overexposure to dust can lead to chronic bronchitis and chronic lung inflammation.

Main symptoms Irritation of nose and throat. Irritation of eyes and mucous membranes.

Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard statements The mixture does not meet the criteria for classification.

Precautionary statements

Prevention Observe good industrial hygiene practices.

Response Get medical advice/attention if you feel unwell.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Supplemental label information None.

Other hazards Not a PBT or vPvB substance or mixture.

Section 3: Composition/information on ingredients

Mixture

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Ammonium dihydrogenorthophosphate	38 - 42	7722-76-1 231-764-5	-	-	#
Classification:					
DSD:	-				
CLP:	-				
Ammonium sulphate	48 Approx	7783-20-2 231-984-1	-	-	#
Classification:					
DSD:	-				
CLP:	-				

#: This substance has workplace exposure limit(s).

DSD: Directive 67/548/EEC.

CLP: Regulation No. 1272/2008.

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Section 4: First aid measures

Description of first aid measures

Inhalation	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. If symptomatic, move to fresh air. Get medical attention if symptoms persist.
Skin contact	Contact with dust: Wash area with soap and water. Get medical attention if irritation develops or persists.
Eye contact	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion	Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed Irritation of nose and throat. Irritation of eyes and mucous membranes. Coughing.

Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically.

Section 5: Firefighting measures

General fire hazards Product is an extinguishing medium. It does not burn or support combustion.

Extinguishing media

Suitable extinguishing media	No specific measures are required as this product is a fire extinguishing medium.
Unsuitable extinguishing media	Not applicable.

Special hazards arising from the substance or mixture Not a fire hazard.

Advice for firefighters

Special protective equipment for firefighters	Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire.
Special firefighting procedures	No specific precautions.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Avoid inhalation of dust and contact with skin and eyes.

For emergency responders Avoid formation of dust. Use personal protection recommended in Section 8 of the SDS.

Environmental precautions Avoid discharge to the aquatic environment.

Methods and material for containment and cleaning up Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. For waste disposal, see Section 13.

Reference to other sections For waste disposal, see section 13.
For personal protection, see section 8.

Section 7: Handling and storage

Precautions for safe handling Use work methods which minimise dust production. Use only in well-ventilated areas. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store in original container. Store in a cool, dry, well-ventilated place. Store extinguisher in an upright position not more than three high. Store away from incompatible materials. Read and follow manufacturer's recommendations.

Specific end use(s) Firefighting Powder for use on Class A, B, C and E fires.

Section 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits

France

Components	Type	Value	Form
Ammonium sulphate (7783-20-2)	VME	5 mg/m ³	Respirable fraction.
		10 mg/m ³	Inhalable fraction.

Germany

Components	Type	Value	Form
Ammonium sulphate (7783-20-2)	TWA	3 mg/m ³	Respirable fraction.
		10 mg/m ³	Inhalable fraction.

Russian Federation. Hygiene Norm GN 2.2.5.1313-03. Executive No. 76 of 30 April 2003. Maximum allowable concentration (MAC) of harmful substances in the air of working zones, as amended.

Components	Type	Value	Form
Ammonium dihydrogen orthophosphate (7722-76-1)	Ceiling	10 mg/m ³	Aerosol
Ammonium sulphate (7783-20-2)	Ceiling	10 mg/m ³	Aerosol

Spain

Components	Type	Value	Form
Ammonium sulphate (7783-20-2)	TWA (VLA-ED)	3 mg/m ³	Respirable fraction.
		10 mg/m ³	Inhalable fraction.

United Kingdom

Components	Type	Value	Form
Ammonium sulphate (7783-20-2)	TWA	4 mg/m ³	Respirable dust.
		10 mg/m ³	Inspirable dust.

Recommended monitoring procedures Follow standard monitoring procedures.

DNEL Not available.

PNEC Not available.

Exposure controls

Appropriate engineering controls Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimise the risk of exposure.

Individual protection measures, such as personal protective equipment

General information Use personal protective equipment as required. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection Wear approved safety goggles.

Skin protection

- Hand protection It is a good industrial hygiene practice to minimise skin contact. For prolonged or repeated skin contact use suitable protective gloves.

- Other Wear suitable protective clothing. It is a good industrial hygiene practice to minimise skin contact.

Respiratory protection In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter (type P2).

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Handle in accordance with good industrial hygiene and safety practices. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

Environmental exposure controls Contain spills and prevent releases and observe national regulations on emissions.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid.
Form	Fine powder.
Colour	Various.
Odour	Odourless.
Odour threshold	Not available.
pH	4,5 of 5% solution in water
Melting point/freezing point	Not available.
Boiling point, initial boiling point, and boiling range	Not available.
Flash point	Not applicable.
Auto-ignition temperature	Not applicable.
Flammability (solid, gas)	Not applicable.
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Oxidising properties	Not oxidizing.
Explosive properties	Not explosive.
Explosive limit	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Evaporation rate	Not applicable.
Relative density	Not available.
Density	1000 - 1300 kg/m ³
Solubility (water)	Soluble in water, but silicon additive delays dissolution.
Partition coefficient (n-octanol/water)	Not available.
Decomposition temperature	190 °C (374 °F)
Viscosity	Not applicable.
Percent volatile	Not available.
Other information	No relevant additional information available.

Section 10: Stability and reactivity

Reactivity	The product is stable and non reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal temperature conditions.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.
Conditions to avoid	Temperatures above melting point. Contact with alkalis.
Incompatible materials	Strong acids. Strong bases. Strong oxidising agents. Alkali metals. Magnesium. Water.
Hazardous decomposition products	Ammonia. Sulphur oxides. Oxides of phosphorus. Carbon oxides.

Section 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Ingestion Under normal conditions of intended use, this material does not pose a risk to health. However, accidental ingestion of the content may cause discomfort.

Inhalation	Dust may irritate respiratory system.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Dust may irritate the eyes.
Symptoms	Irritation of eyes and mucous membranes. Exposed may experience eye tearing, redness, and discomfort.

Information on toxicological effects

Acute toxicity May cause eye, skin and respiratory tract irritation.

Components

Test results

Ammonium sulphate (7783-20-2)	Acute Inhalation LC50 Rat: > 1000 mg/m ³ 8 Hours Acute Oral LD50 Rat: 2840 mg/kg
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Skin corrosion/irritation Dust may irritate skin.

Serious eye damage/eye irritation Dust in the eyes will cause irritation.

Respiratory sensitisation No data available.

Skin sensitisation Dust may irritate skin.

Germ cell mutagenicity No data available.

Carcinogenicity Not available.

Reproductive toxicity No data available.

Specific target organ toxicity - single exposure None known.

Specific target organ toxicity - repeated exposure None known.

Aspiration hazard Not applicable.

Mixture versus substance information None known.

Other information Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

Section 12: Ecological information

Toxicity

Components

Test results

Ammonium sulphate (7783-20-2)	LC50 Mozambique tilapia (<i>Tilapia mossambica</i>): 155 - 195 mg/l 96 hours
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Persistence and degradability Not available.

Bioaccumulative potential The product is not expected to bioaccumulate.

Mobility The product is partly soluble in water. May spread in the aquatic environment.

Environmental fate - Partition coefficient Not available.

Mobility in soil Not available.

Results of PBT and vPvB assessment Not available.

Other adverse effects The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Section 13: Disposal considerations

Waste treatment methods

Residual waste Dispose of waste and residues in accordance with local authority requirements.

Contaminated packaging Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code 16 05 09 Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: Transport information

ADR

The product is not covered by international regulation on the transport of dangerous goods.

RID

The product is not covered by international regulation on the transport of dangerous goods.

ADN

The product is not covered by international regulation on the transport of dangerous goods.

IATA

The product is not covered by international regulation on the transport of dangerous goods.

IMDG

The product is not covered by international regulation on the transport of dangerous goods.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code No information available.

Section 15: Regulatory information

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

EU regulations

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V

Not listed.

Directive 96/61/EC concerning integrated pollution prevention and control (IPPC): Article 15, European Pollution Emission Registry (EPER)

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List

Not listed.

Other regulations

The product does not need to be labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

National regulations

Follow national regulation for work with chemical agents.

Chemical safety assessment

No Chemical Safety Assessment has been carried out.

Section 16: Other information

List of abbreviations

DNEL: Derived No-Effect Level.
PNEC: Predicted No-Effect Concentration.
PBT: Persistent, bioaccumulative and toxic.
vPvB: Very Persistent and very Bioaccumulative.
DSD: Directive 67/548/EEC.
CLP: Regulation No. 1272/2008.

References

HSDB® - Hazardous Substances Data Bank
Registry of Toxic Effects of Chemical Substances (RTECS)

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements or R-phrases and H-phrases under Sections 2 to 15

None.

Training information

Follow training instructions when handling this material.

Disclaimer

This information is based on our current knowledge and is believed to be correct as of the date issued. The information is intended to describe the product for the purposes of health, safety and environmental requirements only and no warranty, express or implied, is made. It should also not be construed as guaranteeing any specific property of the product. In addition, information obtained from a database is subject to change and may not be as current as the information in the MSDS available directly from UTCFS.

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