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

1.1 Product identifier
Trade name: Potassium hydrogen phosphate, dried
Stock number: A11321
CAS Number: 7758-11-4
EC number: 231-834-5

1.2 Relevant identified uses of the substance or mixture and uses advised against.
Identified use: SU24 Scientific research and development

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier: Alfa Aesar GmbH & Co.KG
Zeppelinstr. 7b
76185 Karlsruhe / Germany
Tel: +49 (0) 721 84007 280
Fax: +49 (0) 721 84007 300
Email: tech@alfa.com
www.alfa.com
Informing department: Product safety Tel + +049 (0) 7275 988687-0

1.4 Emergency telephone number:
Carechem 24: +44 (o) 1235 239 670 (Multi-language emergency number)
Poison Information Center Mainz: www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
GHS07
Eye Irrit. 2 H319 Causes serious eye irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC
Xi; Irritant
R36: Irritating to eyes.
Information concerning particular hazards for human and environment: Not applicable
Other hazards that do not result in classification: No information known.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
The substance is classified and labelled according to the CLP regulation.

Hazard pictograms
GHS07

Signal word: Warning
Hazard statements: H319 Causes serious eye irritation.
Precautionary statements:
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264 Wash thoroughly after handling.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 IF IN EYES: Rinse cautiously with water for several minutes. Then consult doctor.

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances
CAS# Designation: 7758-11-4 Potassium hydrogen phosphate
Identification number(s):
EC number: 231-834-5

SECTION 4: First aid measures

4.1 Description of first aid measures
After inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
After skin contact: Seek immediate medical advice. Wash thoroughly after handling.
After eye contact: Rinse opened eye for several minutes under running water. Then consult doctor.
After swallowing: Seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents: Product is not flammable. Use fire fighting measures that suit the surrounding fire.

5.2 Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Phosphorus oxides
Potassium oxide

5.3 Advice for firefighters
Protective equipment: Wear self-contained breathing apparatus.
Wear full protective suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation

6.2 Environmental precautions:
Do not allow product to reach sewage system or water bodies.
Do not allow to enter the ground/soil.

6.3 Methods and material for containment and cleaning up:
Collect mechanically.
No special measures required.

(Contd. on page 2)
SECTION 7: Handling and storage

7.1 Precautions for safe handling
Handle under dry protective gas.
Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:
The product is not flammable.

7.2 Conditions for safe storage, including any incompatibilities
Storage
Requirements to be met by storerooms and containers:
No special requirements.
Information about storage in one common storage facility:
Store away from water.
Store away from oxidising agents.
Further information about storage conditions:
Store under dry inert gas.
This product is hygroscopic.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Protect from humidity and keep away from water.

7.3 Specific end use(s)
No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Components with critical values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information:
No data

8.2 Exposure controls
Personal protective equipment
General protective and hygienic measures
The usual precautionary measures should be adhered to in handling the chemicals.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
Maintain an ergonomically appropriate working environment.

Breathing equipment:
Use breathing protection with high concentrations.

Protection of hands:
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Material of gloves
Impervious gloves
Penetration time of glove material
Not determined
Eye protection:
Safety glasses
Face protection
Body protection:
Protective work clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
General Information
Appearance:
Form: Powder
Colour: White
Smell: Not determined
Odour threshold: Not determined
pH-value: Not applicable.

Change in condition
Melting point/Melting range: Not determined
Sublimation temperature / start: Not determined
Inflammability (solid, gaseous): Not determined
Ignition temperature: Not determined
Decomposition temperature: Not determined
Self-inflammability: Not determined.

Danger of explosion:
Not determined.

Critical values for explosion:
Lower: Not determined
Upper: Not determined
Steam pressure: Not applicable.
Density: Not determined
Relative density: Not determined
Vapour density: Not applicable.
Evaporation rate: Not applicable.
Solubility in / Miscibility with Water: Not determined
Partition coefficient (n-octanol/water): Not determined.

Viscosity:
dynamic: Not determined.
kinematic: Not determined.

9.2 Other information
No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
No information known.

10.2 Chemical stability
Stable under recommended storage conditions.
38.0.24

Thermal decomposition / conditions to be avoided:
No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions
Reacts with strong oxidizing agents

10.5 Incompatible materials:
Water/moisture
Oxidising agents

10.6 Hazardous decomposition products:
Phosphorus oxides (e.g. P2O5)
Potassium oxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity:
LD/LC50 values that are relevant for classification:
No data

Skin irritation or corrosion:
May cause irritation

Eye irritation or corrosion:
Causes serious eye irritation.

Sensitization:
No sensitizing effect known.

Germ cell mutagenicity:
No effects known.

Reproductive toxicity:
No effects known.

Specific target organ system toxicity - repeated exposure:
No effects known.

Specific target organ system toxicity - single exposure:
No effects known.

Aspiration hazard:
No effects known.

Subacute to chronic toxicity:
No effects known.

Additional toxicological information:
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity:
No further relevant information available.

12.2 Persistence and degradability
No further relevant information available.

12.3 Bioaccumulative potential
No further relevant information available.

12.4 Mobility in soil
Additional ecological information:
General notes:
Water hazard class 1 (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

Avoid transfer into the environment.

12.5 Results of PBT and vPvB assessment
PBT:
Not applicable.

vPvB:
Not applicable.

12.6 Other adverse effects
No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation
Hand over to disposers of hazardous waste.

Must be specially treated under adherence to official regulations.

Consult state, local or national regulations for proper disposal.

Uncleaned packagings:
Recommendation:
Disposal must be made according to official regulations.

SECTION 14: Transport information

UN-Number
ADR, ADN, IMDG, IATA
Not applicable

14.2 UN proper shipping name
ADR, ADN, IMDG, IATA
Not applicable

14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA
Class
Not applicable

Packing group
ADR, IMDG, IATA
Not applicable

14.5 Environmental hazards:
Not applicable.

14.6 Special precautions for user
Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

UN "Model Regulation":
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SEASON 16: Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing SDS:

Health, Safety and Environmental Department.

Abbreviations and acronyms:

ADPR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
EINECS: European Inventory of Existing Commercial Chemical Substances.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
VbF: Verordnung über brennbare Flüssigkeiten, Österreich (Ordinance on the storage of combustible liquids, Austria).
LC50: Lethal concentration, 50 percent.
LD50: Lethal dose, 50 percent.
vPvB: very Persistent and very Bioaccumulative.
ACGIH: American Conference of Governmental Industrial Hygienists (USA).
OSHA: Occupational Safety and Health Administration (USA).
NTP: National Toxicology Program (USA).
IARC: International Agency for Research on Cancer.
EPA: Environmental Protection Agency (USA).
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2.