Safety data sheet according to 1907/2006/EC, Article 31

Printing date 02.07.2013 Revision: 20.08.2012

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

1.1 Product identifier

Informing department:

Sodium pyrophosphate, 200mM buffer soln.

J62052 Trade name Stock number

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 A Johnson Matthey Company Zeppelinstr. 7b 76185 Karlsruhe / Germany Tel: +49 (0) 721 84007 280 Fax: +49 (0) 721 84007 300 Email: tech@alfa.com

www.alfa.com

www.arra.com Product safety Tel + +049 (0) 7275 988687-0 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 1.4 Emergency telephone number:

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008

The product is not classified as hazardous to health or the environment according to the CLP regulation.

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

Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Other hazards that do not result in classification

No information known.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms Signal word

Not applicable Not applicable Not applicable Not applicable

Not applicable

Hazard statements 2.3 Other hazards Results of PBT and vPvB assessment

PRTvPvB:

Not applicable. Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Dangerous components: Additional information Not applicable None known

Non-Hazardous Ingredients

Sodium pyrophosphate

CAS: 7758-16-9

Water

CAS: 7732-18-5 EINECS: 231-791-2

95,6%

4,4%

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. Seek immediate medical advice. After skin contact

Instantly wash with water and soap and rinse thoroughly. Seek immediate medical advice.

After eye contact

Rinse opened eye for several minutes under running water. Then consult doctor. Seek medical tréatment.

Use fire fighting measures that suit the environment.

After swallowing 4.2 Most important symptoms and effects, both acute and delayed 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available No further relevant information available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents 5.2 Special hazards arising from the

substance or mixture

If this product is involved in a fire, the following can be released: Sodium oxide

Phosphorus oxides

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

6.2 Environmental precautions:

6.4 Reference to other sections

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

Do not allow material to be released to the environment without proper governmental permits. 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:
Prevention of secondary hazards:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Absorb with riquid-binding material (sand, dialormic, dolors). No special measures required.

See Section 7 for information on safe handling
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep containers tightly sealed. Store in cool, dry place in tightly closed containers.

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Trade name Sodium pyrophosphate, 200mM buffer soln.

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

Information about storage in one common

storage facility:

No special requirements.

Water reacts with many metals to give hydrogen, often violently. Water also reacts violently with many reactive

organic and inorganic chemicals.

Further information about storage

conditions:

Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of

technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

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.

No data

Additional information:

7.3 Specific end use(s)

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. Maintain an ergonomically appropriate working environment. Use breathing protection with high concentrations. Check protective gloves prior to each use for their proper condition. 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. Impervious gloves

Breathing equipment: Protection of hands:

Not determined.

Product is not selfigniting.

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance: Form: Colour:

Odour threshold:

Smell:

Liquid Colourless Not determined Not determined.

pH-value:

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

Critical values for explosion:

Lower: Not determined Upper: Not determined

Steam pressure at 20 °C: Density

23 hPa Relative density
Vapour density
Evaporation rate
Solubility in / Miscibility with
Water: Not determined Not determined. Not determined. Not determined. Fully miscible

Partition coefficient (n-octanol/water): Not determined. Viscosity: dynamic Not determined. kinematic: Not determined.

Solvent content: Organic solvents:

0,0 % 4,4 %

Solids content: 9.2 Other information

No further relevant information available

SECTION 10: Stability and reactivity

No information known. Stable under recommended storage conditions.

10.1 Reactivity 10.2 Chemical stability Thermal decomposition / conditions to be

avoided: 10.3 Possibility of hazardous reactions 10.5 Incompatible materials:

No decomposition if used and stored according to specifications.

Water reacts violently with alkali metals.

Water reacts with many metals to give hydrogen, often violently. Water is also incompatible with many reactive organic and inorganic chemicals.

Sodium oxide

Phosphorus evides (o.g. P305)

10.6 Hazardous decomposition products:

Phosphorus oxides (e.g. P2O5)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity: LD/LC50 values that are relevant for

classification: Skin irritation or corrosion:

No data

May cause irritation

No effects known.

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Trade name Sodium pyrophosphate, 200mM buffer soln.

Eye irritation or corrosion: May cause irritation

Sensitization:

No sensitizing effect known. No effects known. Germ cell mutagenicity: Carcinogenicity:

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA

or ACGIH. No effects known.

No effects known. No effects known.

Specific target organ system toxicity -

repeated exposure: Specific target organ system toxicity - single

Reproductive toxicity:

Aspiration hazard:

No effects known. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known

The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

SECTION 12: Ecological information

12.1 Toxicity

12.1 TOXICITY
Aquatic toxicity:
12.2 Persistence and degradability
12.3 Bioaccumulative potential
12.4 Mobility in soil
Additional ecological information: No further relevant information available. No further relevant information available. No further relevant information available. No further relevant information available.

General notes:

Do not allow material to be released to the environment without proper governmental permits. 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: vPvB:

Not applicable. Not applicable. No further relevant information available. 12.6 Other adverse effects

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Uncleaned packagings:

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.

Recommendation:
Recommended cleaning agent: Disposal must be made according to official regulations.

Water, if necessary with cleaning agent.

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:

Marine pollutant:

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":

SECTION 15: Regulatory information

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

Australian Inventory of Chemical Substances

7732-18-5 Water

Standard for the Uniform Scheduling of Drugs and Poisons

None of the ingredients is listed.

National regulations

Information about limitation of use: Classification according to VbF: For use only by technically qualified individuals. Not applicable

Water hazard class:

Water hazard class 1 (Self-assessment): slightly hazardous for water. Other regulations, limitations and prohibitive regulations

ELINCS (European List of Notified Chemical Substances)

None of the ingredients is listed.

Substances of very high concern (SVHC) according to REACH, Article 57 None of the ingredients are listed.

REACH - Pre-registered substances

7732-18-5 Water

A Chemical Safety Assessment has not been carried out. 15.2 Chemical safety assessment:

SECTION 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 data specification sheet: Health, Safety and Environmental Department.

Abbreviations and acronyms:

ADR: 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

VbF: Verordnung über brenhare Flüssigkeiten, Österreich (Ordinance on the storage of combustible liquids, Austria)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent