

EC safety data sheet

Trade name: Natriumpentaborat, angereichert

Version: 1.0.0 / GB

Status: 27.06.2011

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

Trade name

Natriumpentaborat, angereichert

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

Relevant identified uses of the substance or mixture

nuclear technology, neutron absorption

Details of the supplier of the safety data sheet

Address

Ceradyne Boron Products
3250 South 614 Road
PO Box 798
Quapaw
USA

OK 74363

Telephone no. +1 - 918 673-2201

Fax no. +1 - 918 673-1052

Emergency telephone

Infotrac: +1 - 800 - 535 - 5053 (24h)

Advice on Safety Data Sheet

CSchmalzried@esk.com

Only representative according to art. 8 Regulation (EC) 1907/2006

Address

Dr. Clemens Schmalzried
Safety & Environmental Services
ESK Ceramics GmbH & Co. KG
Max-Schaidhauf-Strasse 25
87437 Kempten
GERMANY

Telephone no. +49 (0) 831 5618 506

Fax no. +49 (0) 831 5618 8506

2.) Hazards identification

Label elements

Labelling according to Directive 1999/45/CE

Hazard symbols

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R phrases

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S phrases

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3.) Composition / information on ingredients

Chemical characterization

NaPB; B10-NaPB; B10 enriched NaPB

Substance / product identification

CAS no. 200443-98-7

4.) First aid measures

General information

In all cases of doubt, or when sickness symptoms persist, seek medical attention. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air. In case of persisting adverse effects consult a physician.

After skin contact

Wash immediately with plenty of water for several minutes. Consult a doctor if skin irritation persists.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Get medical attention if pain still persists.

After ingestion

Call in a physician immediately and show him the Safety Data Sheet. Do not induce vomiting. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.

5.) Fire-fighting measures

Suitable extinguishing media

Water spray jet; Carbon dioxide; Foam; Dry chemicals

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

In case of combustion evolution of dangerous gases possible. In the event of fire, the following can be released:
Boron oxides

Special protective equipment for fire-fighters

Use self-contained breathing apparatus. Wear protective clothing.

Other information

Cool endangered containers with water spray jet.

6.) Accidental release measures

Personal precautions

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Avoid dust formation.

Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

Methods for cleaning up/taking up

Take up mechanically. Clean contaminated surfaces thoroughly with water and soap. Send in suitable containers for recovery or disposal.

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7.) Handling and storage

Handling

Advice on safe handling

Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far as possible by the state of the art. Provide good ventilation of working area (local exhaust ventilation, if necessary). Avoid the formation and deposition of dust.

Advice on protection against fire and explosion

Keep away from sources of heat and ignition. Take precautionary measures against static charges. Avoid formation of dust.

Storage

Requirements for storage rooms and vessels

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Always keep in containers of same material as the original one.

Advice on storage assembly

Do not store together with: Oxidizing agents; Acids; corrosives

Further information on storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight.

8.) Exposure controls / personal protection

Exposure limit values

DUST

List of approved workplace exposure limits (WELs) / EH40

total inhalable dust
TWA 10 mg/m³

List of approved workplace exposure limits (WELs) / EH40

respirable dust
TWA 4 mg/m³

Exposure controls

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective glove should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Eye protection

Safety glasses with side protection shield (EN 166)

Skin protection

Normal chemical work clothing.

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General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Do not inhale dust. Store work clothing separately. Remove soiled or soaked clothing immediately. Avoid contact with eyes and skin.

9.) Physical and chemical properties

General information

Form	Powder
Colour	white
Odour	odourless

Important health, safety and environmental information

Changes in physical state

Type	Boiling point
Remarks	not determined
Type	Melting point
Remarks	not determined

Flash point

Remarks	not applicable
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Ignition temperature

Remarks	not applicable
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Explosion limits

Remarks	not applicable
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Density

Value	1,72	g/cm ³
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Solubility in water

Value	15,4	%
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10.) Stability and reactivity

Conditions to avoid

None, if handled according to order.

Materials to avoid

Oxidizing agents; strong acids; highly corrosive substances

Hazardous decomposition products

Toxic gases/vapours; Boron oxides

Thermal decomposition

Remarks	No decomposition if used as prescribed.
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11.) Toxicological information

Experience in practice

Eye contact with the product may lead to irritation. Irritating effects on skin is possible. Inhalation may lead to irritation of the respiratory tract.

Other information

Product specific toxicological data are not known.

