

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

BERMOCOLL E 230 X

Version 3 Revision Date 19.06.2014 Print Date 29.06.2015 GB / EN

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name : BERMOCOLL E 230 X

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

Use of the : Specific use(s): Rheological modification

Substance/Mixture Water retention and stability

1.3 Details of the supplier of the safety data sheet

Company : Akzo Nobel

Functional Chemicals AB

Stenunge Allé 3

SE 444 85 Stenungsund

Sweden

Telephone : +4630385000 Telefax : +46303771257

E-mail address : RegulatoryAffairs@akzonobel.com

1.4 Emergency telephone number

Emergency telephone

number

: AkzoNobel: +31 57 06 79211

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.3 Other hazards

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Risk of dust explosion. No further data available.

PBT and vPvB assessment

: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Remarks : No dangerous ingredients according to Directive

67/548/EEC.

: not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

REACH - Candidate List of

Substances of Very High Concern for Authorisation

(Article 59).

Non-hazardous substance

| Chemical Name | CAS-No. EC-No. REACH No. | Concentration [%] | | |
|-----------------------------|--------------------------------|-------------------|--|--|
| Ethylhydroxyethyl cellulose | 9004-58-4 | 60 - 100 | | |

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice : No hazards which require special first aid measures.

If inhaled : Remove to fresh air.

Keep patient warm and at rest. Rinse nose and mouth with water.

In case of skin contact : Remove contaminated clothing.

Rinse with water.

In case of eye contact : Rinse with plenty of water.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If swallowed : Clean mouth with water and drink afterwards plenty of water.

Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

Risks : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

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SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting / Specific hazards arising from the chemical

: Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of

dust, e.g. on floors and ledges.

Combustion products : No hazardous combustion products are known

5.3 Advice for firefighters

Special protective equipment

for firefighters

: In the event of fire, wear self-contained breathing apparatus.

Further information : Standard procedure for chemical fires.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid dust formation.

6.2 Environmental precautions

Environmental precautions : No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up / Methods for containment

: Use an electrically protected vacuum cleaner. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Additional advice : For personal protection see section 8.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.

Avoid creating dust.

Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

Avoid spillage on floor as the product can become very

slippery when wet.

Advice on protection against

fire and explosion

: Provide appropriate exhaust ventilation at places where dust

is formed.

No sparking tools should be used.

Dust explosion class : St1

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Keep in a dry place.

Store at room temperature in the original container.

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Keep container tightly closed.

Advice on common storage : No special restrictions on storage with other products.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : No information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

| Components | CAS-No. | Value | Control parameters | Update | Basis | Form of exposure |
|------------|---------|-------|-----------------------|------------|---------|------------------|
| Dust | | TWA | 4 mg/m3 | 1997-01-01 | GB EH40 | Total dust |

STEL: Short term exposure limit TWA: Time Weighted Average

8.2 Exposure controls

Engineering Controls

Provide appropriate exhaust ventilation at places where dust is formed.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally

required.

In the case of dust, vapour or aerosol formation use a

respirator with an approved filter.

Half mask with a particle filter P2 (EN 143).

Hand protection : For prolonged or repeated contact use protective gloves.

Protective gloves complying with EN 374.

Eye protection : Safety glasses

Hygiene measures : General industrial hygiene practice.

Environmental exposure controls

General advice : No special environmental precautions required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form : powder

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Colour : off-white

Odour : odourless

Odour Threshold : No data available

Safety data

pH : 5.5 - 8 at 0.5 % solution

Melting point/range : No data available

Boiling point/boiling range : not applicable

Flash point : not applicable

Ignition temperature : 420 °C

Method: EN 50281-2-1

Evaporation rate : not applicable

Flammability (solid, gas) : No data available

Lower explosion limit : 30 g/m3

Upper explosion limit : No data available

Vapour pressure : not applicable

Relative vapour density : not applicable

Relative density : No data available

Water solubility : Soluble, gel formation.

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature : 120 °C

Method: EN 15188

Burning number : 5

Decomposition temperature : > 100 °C

Avoid elevated temperatures. At temperatures above ~100 °C the product will slowly decompose and dissolving qualities are impaired. At temperatures above 200 °C charring of the

imparied. At temperatures above 200 °C char

product will occur.

Viscosity, dynamic : 260 - 360 mPa.s at 20 °C

pH 7 at 2 % solution.

Viscosity, kinematic : No data available

Dust explosion class : St1

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Explosive properties : No data available

Minimum ignition energy : > 10 mJ

Oxidizing properties : The substance or mixture is not classified as oxidizing.

9.2 Other information

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Dust may form explosive mixture in air.

10.4 Conditions to avoid

Conditions to avoid : Keep away from open flames, hot surfaces and sources of

ignition.

10.5 Incompatible materials

Materials to avoid : None known.

10.6 Hazardous decomposition products

Hazardous decomposition

products

: No hazardous decomposition products are known.

Thermal decomposition : > 100 °C

Avoid elevated temperatures. At temperatures above ~100 $^{\circ}\text{C}$ the product will slowly decompose and dissolving qualities are

impaired. At temperatures above 200 °C charring of the

product will occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Product information:

Hazard Summary

Inhalation : Product dust may be irritating to the respiratory system.

Skin : Product dust may be irritating to skin.

Eyes : Product dust may be irritating to eyes.

Ingestion : Not expected to be irritating.

Toxicology Assessment

Further information : No further data available.

11.1 Information on toxicological effects

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Test result

Acute oral toxicity : LD50: > 5,000 mg/kg

Species: rat

Read-across (Analogy)

SECTION 12: ECOLOGICAL INFORMATION

Product information: Ecotoxicology Assessment

Additional ecological : None known.

information 12.1 Toxicity

Test result

Toxicity to fish : LC50: > 100 mg/l

Exposure time: 96 h

Species: Oncorhynchus mykiss (rainbow trout)

Read-across (Analogy)

Toxicity to daphnia and other

aquatic invertebrates

: EC50: > 100 mg/l Exposure time: 48 h

Species: Daphnia magna (Water flea)

Read-across (Analogy)

12.2 Persistence and degradability

Product information:

Biodegradability : Result: Not readily biodegradable.

Components : No information available.

12.3 Bioaccumulative potential

Product information:

Bioaccumulation : Bioaccumulation is unlikely.

Components : No information available.

12.4 Mobility in soil

Product information:

Mobility : No data available

Components : No information available.

12.5 Results of PBT and vPvB assessment

Product information:

PBT and vPvB assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

Components : No information available.

12.6 Other adverse effects

Product information:

Biochemical Oxygen

Demand (BOD)

: No data available

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Components : No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Contaminated packaging : Empty remaining contents.

Empty containers should be taken to an approved waste

handling site for recycling or disposal.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

Not regulated as a dangerous good

14.2 Proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport

regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15: REGULATORY INFORMATION

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

Major Accident Hazard : 96/82/EC Legislation not applicable

Water contaminating class

(Germany)

: WGK 1 slightly water endangering

Notification status

CH INV : YES. The mixture contains a polymer. The monomers for this polymer

have been notified.

TSCA : YES. All chemical substances in this product are either listed on the

TSCA Inventory or in compliance with a TSCA Inventory exemption.

DSL : YES. All components of this product are on the Canadian DSL.

AICS : YES. On the inventory, or in compliance with the inventory NZIOC : YES. On the inventory, or in compliance with the inventory ENCS : YES. On the inventory, or in compliance with the inventory ISHL : YES. On the inventory, or in compliance with the inventory

KECI: YES. On the inventory, or in compliance with the inventory PICCS: YES. On the inventory, or in compliance with the inventory

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IECSC : YES. On the inventory, or in compliance with the inventory

For explanation of abbreviation see section 16.

Further information

This product is to be considered as a preparation according to EU-legislation.

15.2 Chemical Safety Assessment

Product information : not required

SECTION 16: OTHER INFORMATION

Explanations for possible abbreviations mentioned in section 2

PBT: Persistent, bioaccumulative and toxic. vPvB: Very persistent and very bioaccumulative.

OEL: Occupational exposure limit.

Notification status explanation

CH INV Switzerland. New notified substances and declared preparations

TSCA United States TSCA Inventory

DSL Canadian Domestic Substances List (DSL)

AICS Australia Inventory of Chemical Substances (AICS)
NZIOC New Zealand. Inventory of Chemical Substances

ENCS Japan. ENCS - Existing and New Chemical Substances Inventory

ISHL Japan. ISHL - Inventory of Chemical Substances (METI)
KECI Korea. Korean Existing Chemicals Inventory (KECI)

PICCS Philippines Inventory of Chemicals and Chemical Substances

(PICCS)

IECSC China. Inventory of Existing Chemical Substances in China (IECSC)

Further information

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