



The Chemical Company

## Safety data sheet

\*\*\* Form for research and development products \*\*\*

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BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 16.06.2010

Version: 1.0

Product: RD#168513,165948,165949,165950,165951

Date of print 17.06.2010

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

#### **RD#168513,165948,165949,165950,165951**

Company:

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GERMANY

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International emergency number:

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### 2. Hazards Identification

#### **Possible Hazards (according to Directive 67/548/EWG or 1999/45/EC)**

Prolonged or repeated contact may cause mild skin irritation.

May cause some eye irritation which should cease after removal of the product.

May cause some irritation to the respiratory system if dust is inhaled.

This type of product has a tendency to create dust if roughly handled. It does not burn readily but as with many organic powders, flammable dust clouds may be formed in air.

Very slippery when wet.

Low acute LC50/EC50 to aquatic organisms, but does not cause long-term adverse effects in the aquatic environment. See section 12 for details.

### 3. Composition/Information on Ingredients

Chemical nature

cationic, Polymer

#### 4. First-Aid Measures

General advice:

Remove contaminated clothing.

If inhaled:

If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth and then drink plenty of water. Never give anything by mouth to an unconscious person. Check breathing and pulse. Place victim in the recovery position, cover and keep warm. Loosen tight clothing such as a collar, tie, belt or waistband. Seek medical attention.

Note to physician:

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

#### 5. Fire-Fighting Measures

Suitable extinguishing media:

dry powder, foam, extinguishing media appropriate for surrounding fire

Unsuitable extinguishing media for safety reasons:

water jet, carbon dioxide

Additional information:

If water is used, restrict pedestrian and vehicular traffic in areas where slip hazard may exist.

Specific hazards:

carbon oxides, nitrogen oxides

The substances/groups of substances mentioned can be released in case of fire.

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

#### 6. Accidental Release Measures

Personal precautions:

Avoid dust formation. Use personal protective clothing.

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Environmental precautions:

Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:

For small amounts: Pick up with suitable appliance and dispose of.

For large amounts: Contain with dust binding material and dispose of.

Spilled product which becomes wet or spilled aqueous solution create a hazard because of their slippery nature. Avoid raising dust.

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## 7. Handling and Storage

### Handling

Breathing must be protected when large quantities are decanted without local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

Avoid dust formation. Take precautionary measures against static discharges.

### Storage

Further information on storage conditions: Store in unopened original containers in a cool and dry place. Avoid wet, damp or humid conditions, temperature extremes and ignition sources.

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## 8. Exposure Controls/Personal Protection

### Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374):

e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)



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**General safety and hygiene measures:**

Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Wearing of closed work clothing is recommended. Hands and/or face should be washed before breaks and at the end of the shift. Remove contaminated clothing immediately and wash before reuse.

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**9. Physical and Chemical Properties**

Form:	beads
Colour:	off-white
Odour:	mild
pH value:	The product has not been tested.
Melting point:	The substance / product decomposes therefore not determined.
Flash point:	not applicable
Self ignition:	As with many organic powders flammable dust clouds may be formed.
Explosion hazard:	not applicable
Fire promoting properties:	not applicable
Vapour pressure:	The product has not been tested.
Bulk density:	approx. 800 kg/m <sup>3</sup>
Solubility in water:	Forms a viscous solution.
Partitioning coefficient n-octanol/water (log Pow):	not applicable

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**10. Stability and Reactivity****Conditions to avoid:**

Avoid humidity. Avoid extreme temperatures.

**Substances to avoid:**

strong acids, strong bases, strong oxidizing agents

**Hazardous reactions:**

The product is not a dust explosion risk as supplied; however the build-up of fine dust can lead to a risk of dust explosions.

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Hazardous decomposition products:  
No hazardous decomposition products if stored and handled as prescribed/indicated.

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## 11. Toxicological Information

### Acute toxicity

Experimental/calculated data:  
LD50 rat (oral): > 2,000 mg/kg

### Irritation

Experimental/calculated data:  
Skin corrosion/irritation: non-irritant  
The product has not been tested. The statement has been derived from the properties of the individual components.

Serious eyes damages/irritation: non-irritant  
The product has not been tested. The statement has been derived from the properties of the individual components.

### Other relevant toxicity information

The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

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## 12. Ecological Information

### Ecotoxicity

Assessment of aquatic toxicity:  
The test results given above are for an 80 mole % cationic polyacrylamide, products of lower charge will exhibit lower toxicity. Degradation/elimination: by rapid hydrolysis of the polymer and irreversible binding to dissolved organic carbon and inorganic sediment matter. Not subject to environmental classification according to EU Directives due to rapid degradation by hydrolysis.

Toxicity to fish:  
LC50 (96 h) 1 - 10 mg/l

Aquatic invertebrates:  
EC50 (48 h) 10 - 100 mg/l

Aquatic plants:  
EC50 (72 h) 1 - 10 mg/l

### Persistence and degradability

Elimination information:  
not determined

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### **Bioaccumulation potential**

Assessment bioaccumulation potential:  
Accumulation in organisms is not to be expected.

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## **13. Disposal Considerations**

Must be dumped or incinerated in accordance with local regulations.

Contaminated packaging:

Packs that cannot be cleaned should be disposed of in the same manner as the contents.  
Uncontaminated packaging can be re-used.

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## **14. Transport Information**

### **Land transport**

ADR

Not classified as a dangerous good under transport regulations

RID

Not classified as a dangerous good under transport regulations

### **Inland waterway transport**

ADNR

Not classified as a dangerous good under transport regulations

### **Sea transport**

IMDG

Not classified as a dangerous good under transport regulations

### **Air transport**

IATA/ICAO

Not classified as a dangerous good under transport regulations

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## **15. Regulatory Information**

**Regulations of the European union (Labelling) / National legislation/Regulations**

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The product does not require a hazard warning label in accordance with EC Directives.

Other regulations

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**16. Other Information**

Unsuitable for use: THIS MATERIAL IS NOT INTENDED FOR USE IN PRODUCTS FOR WHICH PROLONGED CONTACT WITH MUCOUS MEMBRANES, BODY FLUIDS OR ABRADED SKIN, OR IMPLANTATION WITHIN THE HUMAN BODY, IS SPECIFICALLY INTENDED, UNLESS THE FINISHED PRODUCT HAS BEEN TESTED IN ACCORDANCE WITH NATIONALLY AND INTERNATIONALLY APPLICABLE SAFETY TESTING REQUIREMENTS. BECAUSE OF THE WIDE RANGE OF SUCH POTENTIAL USES, WE ARE NOT ABLE TO RECOMMEND THIS MATERIAL AS SAFE AND EFFECTIVE FOR SUCH USES AND ASSUME NO LIABILITY FOR SUCH USES.

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Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.