

# Safety Data Sheet

## 1. Identification

### CATIONIC POLYMER (Zetag 8160)

Use : Processing aid for industrial applications  
Company : Chemical Research Products Industrial Sales Incorporated 1606-A East Tower,  
Philippine Stock Exchange Center, Exchange Road, Ortigas Center, Pasig City  
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### Emergency Information

Chemical Research Technical Tel. No.: (02) 687-6541

## 2. Hazard(s) Identification



Aqueous solutions or powders that become wet render surfaces extremely slippery.

## 3. Composition/Information on Ingredients

Cationic water-soluble polymer.

## 4. First-Aid Measures

Inhalation : No hazards which require special first aid measures.  
Skin Contact : No hazards which require special first aid measures. Wash with water and soap as a precaution. In case of persistent skin irritation, consult a physician.  
Eye Contact : Rinse thoroughly with plenty of water, also under the eyelids. Wash with water and soap as a precaution. In case of persistent eye irritation, consult a physician.

## 5. Fire Fight Measures

Extinguishing media : Carbon dioxide. Foam, dry powder, water spray  
Exposure hazards : No special fire hazards are known to be associated with this product

- Protection : Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.
- Ingestion : No hazards which require special first aid measures. The product is not considered toxic based on studies on laboratory animals.

## 6. Accidental Release Measures

- Personal precautions : No special precautions required.
- Environmental precautions : As with all chemical products, do not flush into surface water. containers for disposal. After cleaning, flush away traces with water.
- Methods for cleaning up : Do not flush with water. Clean up promptly by scoop or vacuum. Keep in suitable, closed containers for disposal. After cleaning, flush away traces with water.

## 7. Handling and Storage

- Handling requirements : Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Wash hands before breaks and at the end of workday.
- Storage conditions : Keep in a dry, cool place (0 - 35 °C).

## 8. Exposure Control/Personal Protection

- Engineering measures : Use local exhaust if dusting occurs. Natural ventilation is adequate in absence of dusts.
- Respiratory protection : Dust safety masks recommended where working powder concentration is more than 10 mg/m<sup>3</sup>.
- Hand protection : Rubber gloves.
- Eye protection : Safety glasses with side-shields. Do not wear contact lenses where this product is used.
- Skin protection : Chemical resistant apron or protective suit if splashing or repeated contact with solution is likely.

## 9. Physical and Chemical Properties

- Form : Free flowing powder
- Color : White
- Odor : None
- pH : 4.0 - 9.0
- Flash point : Not applicable
- Boiling point (°C) : Not applicable
- Autoignition temperature : Not applicable
- Approx. bulk density : 0.75

Water solubility : See Technical Bulletin

## 10. Stability and Reactivity

Stability : Stable. Hazardous polymerisation does not occur.  
Materials to avoid : Oxidizing agents may cause exothermic reactions.  
Hazardous decomposition products : Thermal decomposition may produce. Hydrogen chloride gas. Nitrogen oxides (NO<sub>x</sub>). Carbon oxides (CO<sub>x</sub>).

## 11. Toxicological Information

### Acute Toxicity

Oral : LD50/oral/rat > 5000 mg/kg.  
Skin : The results of testing on rabbits showed this material to be non-toxic even at high dose levels.  
Inhalation : The product is not expected to be toxic by inhalation.

### Irritation

Skin : Based on laboratory tests, this product does not cause skin irritation.  
Eyes : Testing conducted according to the Draize technique showed the material produces no corneal or iridial effects and only slight transitory conjunctival effects similar to those which all granular materials have on conjunctivae.  
Sensitization : The results of testing on guinea pigs showed this material to be non-sensitizing.  
Chronic toxicity : A two-year feeding study on rats did not reveal adverse health effects. A one-year feeding study on dogs did not reveal adverse health effects.

## 12. Ecological Information

### Aquatic Toxicity

Toxicity to fish : LC50/Danio rerio/96 hours > 10-100 mg/l (OECD 203).  
Toxicity to daphnia : EC50/Daphnia magna/48 hours > 50 mg/l (OECD 202).  
Toxicity to algae : Algal inhibition tests are not appropriate. The flocculation characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.

### Environmental Fate

Hydrolysis : At natural pHs (>6) the polymer degrades due to hydrolysis to more than 70% in 28 days. The hydrolysis products are not harmful to aquatic organisms.

Bioaccumulation : Does not bioaccumulate.

Other ecological information:

The effects of this product on aquatic organisms are rapidly and significantly mitigated by the presence of dissolved organic carbon in the aquatic environment.

### 13. Disposal Consideration

Waste from residues / unused products : In accordance with local, state and federal regulations.  
Contaminated packaging : Rinse empty containers with water and use the rinse-water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local regulations.

### 14. Transport Information

Remarks : Not classified as dangerous in the meaning of transport regulations.

### 15. Regulatory Information

#### Classification and Labeling

This product is not classified as dangerous and need not to be labelled according to EC-Directives as amended.

#### International Inventories

European Union (EINECS/ELINCS) : Existing polymer according to the definition in the 7th Amendment to Directive 67/548/EEC. All starting materials and additives are listed in EINECS.

USA (TSCA) : All components of this product are either listed on the inventory or are exempt from listing.

Canada (DSL) : All components of this product are either listed on the inventory or are exempt from listing.

Australia (AICS) : All components of this product are either listed on the inventory or are exempt from listing.

Japan (ENCS) : All components of this product are either listed on the inventory or are exempt from listing.

China (IECSC) : All components of this product are either listed on the inventory or are exempt from listing.

Korea (ECL) : All components of this product are either listed on the inventory or are exempt from listing.

### 16. Other Information

#### Further information

Full text of hazard symbols and R-phrases if mentioned as hazardous components in chapter 2:

This MSDS was prepared in accordance with the following:  
ISO 11014-1: Material Safety Data Sheet for Chemical Products



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