

# MATERIAL SAFETY DATA SHEET

Clarifix 8870K

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Revision Date: 01/02/2008

## 1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

Product name: Clarifix 8870 K  
Supplier : PT. Amole Sejahtera  
Central Ruko Cibinong Blok B No 10  
Jl. Mayor Oking Jayaatmaja No 63, Cibinong  
Indonesia, 16918

Telephone Number: +6221 87918795 Fax: +6221 87919722

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Indication of preparation: Cationic polymer in solution. It is a high molecular weight of diallyldimethylammonium chloride.

## 3. HAZARDS IDENTIFICATION

Spills produce extremely slippery surfaces

## 4. FIRST AID MEASURES

Inhalation: Move to fresh water.

Skin contact: Wash with water and soap as precaution. In case of persistent skin irritation, consult a physician.

Eye contact: Rinse thoroughly with plenty of water, also under the eyelids. In case of persistent eye irritation, consult a physician.

Ingestion: The product is not considered toxic based on studies on laboratory animals.

## 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water, water spray, carbon dioxide(CO2)and dry powder.

Special fire-fighting precautions: Aquous solutions or powders that become wet render surface extremely slippery.

Special protective equipment for fire-fighters: No special protective equipment required.

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## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** No special precautions required.

**Enviromental precautions:** Do not contaminate water.

**Methods for cleaning up:** Clean up promptly by scoop or vacuum. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with skin and eyes. Wash hands before breaks and at the end of workday.

**Storage:** Keep in a dry, cool place (0 - 35 oC). Keep away from heat and sources of ignition. Freezing will affect the physical condition.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering measures to reduce exposure:** Natural ventilation is adquate in absence of dusts.

**Personal protection equipment**

**Hand Protection:** Rubber gloves.

**Eye protection:** Safety glasses with side-shields. Do not wear contact lenses

**Skin and body protection:** Chemical resistant apron or protective suit if splashing or repeated contact with solution is likely.

**Hygiene measures:** Wash hands before breaks and at the end of workday. Handle in accordance with good industrial hygiene and safety practice.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	Liquid
Colour	:	amber
Odour	:	Slight
pH	:	5 - 7
Melting point ( C )	:	not applicable
Freezing Point ( C )	:	-4 oC
Specific Gravity	:	1.02 - 1.04
Water solubility	:	Completely miscible
Viscosity (cps)	:	500 - 700 cPs

## 10. STABILITY AND REACTIVITY

Stability	:	Product is stable, no hazardous polymerization will occur.
Materials to avoid	:	Oxidizing agents may cause exothermic reaction.
Hazardous decomposition products	:	Thermal decomposition may produce: Hydrogen chloride gas, nitrogen oxides (Nox), carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

Acute toxicity		
Oral	:	LD50/oral/rat > 2000mg/kg
Dermal	:	The product is not considered toxic based on studies on laboratory animals.
Inhalation	:	The products is not expected to be toxic by inhalation.
Iritation		
Skin	:	The results of testing on rabbits showed this material to be non irritating to the skin.
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 conjunctivate.
Chronic toxicity	:	NOEL / Oral / Rat/ 90-day = 5000mg/kg. Two year feeding studies on rats and dogs did not reveal any adverse health effects.

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**Sensitization** : The results of testing on guinea pigs showed this material to be non sensitizing.

**Chronic toxicity** : A two year feeding studies on rats did not reveal adverse health effects. A one year study on dogs did not reveal adverse health effects.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

The aquatic toxicity is highly mitigated by the presence of dissolved organic carbon in the water. Results obtained using the US EPA " Dirty Water" test show that irreversible adsorption onto suspended matter and dissolved organics (such as humic and other organic acid) present in natural waters, reduces the toxicity to aquatic organisms by a factor of over 10.

### Environmental fate

The product is rapidly eliminated from the aquatic medium through irreversible adsorption onto suspended matter and dissolved organics.

**Bioaccumulation** : The product is not expected to bioaccumulate.

**Persistence/degradability** : No Data available.

## 13. DISPOSAL CONSIDERATIONS

**Waste from residues/unused products** : In accordance with local and national regulations.

**Contaminated packaging:** Rise empty containers with water and use the rinse water to prepare the working solution. Can be land filled or incinerated. When in compliance with local regulations.

## 14. TRANSPORT INFORMATION

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