

MATERIAL SAFETY DATA SHEET

Kolon International Corporation
P.O. Box 1052
Seoul, Korea



Section 1. PRODUCT IDENTIFICATION

PRODUCT NAME: K-320 A.

CHEMICAL DESCRIPTION: Anionic polyacrylamide

PRODUCT CLASS: Coagulant aid

MSDS CODE: 0012-11-92

Section 2. HAZARDOUS INGREDIENTS AND EXPOSURE LIMITS

<u>Chemical Name</u>	<u>CAS Number</u>	<u>% by Weight</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
----------------------	-------------------	--------------------	-----------------	------------------

* No ingredients listed in this section *

Section 3. HAZARDS IDENTIFICATION

***** EMERGENCY OVERVIEW *****

This product poses little or no immediate hazard.

PRIMARY ROUTES OF ENTRY: Eye contact, inhalation

TARGET ORGANS: None

POTENTIAL HEALTH EFFECTS:

EYE CONTACT: This product is expected to cause eye irritation due to mechanical action.

SKIN CONTACT: The product is not expected to cause skin irritation upon contact. No data is available to suggest that this product may produce an allergic skin reaction or be absorbed through the skin in harmful amounts.

MATERIAL SAFETY DATA SHEET

INGESTION: This product would be expected to be practically non-toxic by ingestion. Swallowing this product may cause discomfort or gastrointestinal disturbance. Negligible amounts of polymer, if any, are expected to pass through the walls of the GI tract.

INHALATION: As with any particulate matter, inhalation of dust of this product may cause upper respiratory irritation due to mechanical action.

SUBCHRONIC, CHRONIC:

No applicable information was found concerning any potential health effects resulting from subchronic or chronic exposure to the product.

Industrial, medical and environmental health surveys of personnel in plants manufacturing polyacrylamide show a very low degree of hazard from products substantially free of residual acrylamide monomer.

CARCINOGENICITY:

NTP:

No ingredients listed in this section

IARC:

No ingredients listed in the section

OSHA:

No ingredients listed in the section

HMIS RATINGS: Health = 1 Flammability = 1 Reactivity = 0
Personal Protective Equipment = A

Hazard rating scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Section 4. FIRST AID MEASURES

EYE CONTACT: Not expected to require first aid measures.

SKIN CONTACT: Not expected to require first aid measures.

INGESTION: Not an expected route of overexposure.

INHALATION: Not an expected route of overexposure.

Section 5. FIRE-FIGHTING MEASURES

FLASH POINT: Not applicable

EXTINGUISHING MEDIA: Use extinguishing media appropriate for the surrounding fire.

FIRE-FIGHTING INSTRUCTIONS: Exercise caution when fighting any chemical fire. A self-contained breathing apparatus and protective clothing are essential.
Avoid the use of water as product is very slippery when wetted.

FIRE & EXPLOSION HAZARDS: Emits toxic gases under fire conditions.

DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, oxides of nitrogen.

MATERIAL SAFETY DATA SHEET

NFPA RATINGS: Health = 1 Flammability = 1 Reactivity = 0 Special Hazard = None

Hazard rating scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Section 6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Wearing appropriate personal protective equipment, sweep up material and place into suitable container. Spilled product may make floor slippery; spills should be cleaned up immediately to prevent falls.

Section 7. HANDLING AND STORAGE

HANDLING: As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the product and ensure prompt removal from eyes, skin and clothing.
Avoid breathing dust.
Use with adequate ventilation.
Wash thoroughly after handling
Keep container closed when not in use.

STORAGE: No specific information.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION: Chemical splash goggles recommended as a good industrial hygiene practice.
SKIN PROTECTION: No special requirement
RESPIRATORY PROTECTION: If dusty conditions are encountered, wear a NIOSH approved dust respirator.

ENGINEERING CONTROLS:

Local exhaust recommended if handling procedure is generating high dust concentrations.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: Not applicable	SOLUBILITY IN WATER: Moderate
VAPOR PRESSURE: Very low	SPECIFIC GRAVITY: 1.00 - 1.25
VAPOR DENSITY (air = 1): Not applicable	pH: Not applicable
% VOLATILE BY WEIGHT: Negligible	FREEZING POINT: Not available
APPEARANCE AND ODOR: White granular powder with slight ammoniacal odor.	

Section 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable HAZARDOUS POLYMERIZATION: Will not occur
CONDITIONS TO AVOID: No specific information

MATERIAL SAFETY DATA SHEET

INCOMPATIBILITY: Strong oxidizers

DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, oxides of nitrogen.

Section 11. TOXICOLOGICAL INFORMATION

ON PRODUCT:

Oral LD50 (rat): 22 g/kg

Toxicological data on eye: Draize score was reported as 9/110

Toxicological data on skin: PSII was reported as 0/8.

ON INGREDIENTS;

Chemical Name

Oral LD50

(rat)

Dermal LD50

(rabbit)

No ingredients listed in this section

Section 12. ECOLOGICAL INFORMATION

ON PRODUCT:

No information entered at this time.

ON INGREDIENTS:

Chemical Name

Aquatic Toxicity Data

No ingredients listed in this section

Section 13. DISPOSAL CONSIDERATIONS

RCRA STATUS: This product as sold would not be considered a RCRA Hazardous Waste.

DISPOSAL: Dispose of in accordance with local, state and federal regulations.

Section 14. TRANSPORT INFORMATION

DOT CLASSIFICATION:

Hazard Class: Not restricted

Proper Shipping Name: Not applicable

ID Number: Not applicable

Label: None

Section 15. REGULATORY INFORMATION

OSHA Hazard Communication Status: Nonhazardous

TSCA: The ingredients of this product are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CERCLA reportable quantity of EPA hazardous substances in product:

Chemical

RQ

No ingredients listed in this section

Product RQ: Not applicable (Notify EPA of product spills exceeding this amount)

MATERIAL SAFETY DATA SHEET

SARA TITLE III:

Section 302 Extremely Hazardous Substances:

<u>Chemical Name</u>	<u>CAS #</u>	<u>RQ</u>	<u>TPQ</u>
No ingredients listed in this section			

Section 311 and 312 Health and Physical Hazards:

Immediate [no]	Delayed [no]	Fire [no]	Pressure [no]	Reactivity [no]
-------------------	-----------------	--------------	------------------	--------------------

Section 313 Toxic Chemicals:

<u>Chemical Name</u>	<u>CAS #</u>	<u>% by Weight</u>
No ingredients listed in this section		
