

MATERIAL SAFETY DATA SHEET

PRODUCT IDENTIFICATION

PRODUCT NAME: **HYTECH POLYMER**

MANUFACTURER'S NAME: AGRO-K CORPORATION  
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CHEMICAL NAME: Acrylic copolymer dispersion in water.  
FORMULA: Mixture  
CAS NUMBER: Mixture  
CAS NUMBER: AMMONIA: 7664-41-7

PRECAUTIONARY LABELING

WARNING: CAUSES IRRITATION. HARMFUL IF SWALLOWED.

Avoid contact with eyes, skin, clothing. Keep in tightly closed container.  
adequate ventilation. Wash thoroughly after handling.

Use with

PHYSICAL DATA

Boiling Point: 212 degrees F (100 degrees C)  
Freeze Point: 32 degrees F (0 degrees C)  
Specific Gravity:  
(H<sub>2</sub>O = 1) 1.0 - 1.2  
Solubility in Water: Soluble in alkaline water  
% Volatile by Weight: 57 - 66% water  
Vapor Density (air = 1) Water: 0.62  
Vapor Pressure: Water: 17  
pH 6 - 8  
Appearance and Odor Hazy or white milky liquid  
Slight acrylate odor.

FIRE AND EXPLOSION HAZARD DATA

Flash Point N/A Water solution.

Ignition Temperature N/A

Flammable Limits in Air  
(% by volume) Lower: N/A  
Upper: N/A

Extinguishing Media

If water is evaporated, dry polymer could burn. Water spray, ABC dry chemical and protein type air foams are effective. Carbon dioxide may be ineffective on larger fires due to a lack of cooling capacity which may result in reignition.

Special Firefighting Procedure

Wear positive pressure self-contained breathing apparatus (SCBA). Personnel not having suitable respiratory protection must leave the area to prevent significant exposure to toxic combustion gases from burning or decomposition. In enclosed or poorly ventilated areas, wear SCBA during cleanup immediately after a fire as well as during the attack phase of firefighting operations.

Unusual Fire and Explosion Hazards

None know. Water solution.

REACTIVITY DATA

Stability Stable

Hazardous Polymerization Will not occur

Hazardous Decomposition Products

Not determined. Emissions may include CO, CO<sub>2</sub>, acrylates, and hydrocarbons from burning dry polymer.

Incompatibility (condition/materials to avoid)

- Materials that are not compatible with water will not be compatible with this product.
- Avoid contact with strong oxidizing agents such as hydrogen peroxide, permanganates and perchlorates. Depending on the amount and specific materials involved, contact can result in intense heat, boiling, flame development, explosion or toxic gas generation.
- Lowering product pH by acid addition may cause precipitation.

#### HEALTH HAZARD DATA

No toxicity tests have been conducted on this product. Information presented is our best judgment based upon similar products and/or individual components. As with all products for which limited data are available, caution must be exercised through the use of protective equipment and handling procedures to minimize exposure.

#### ACUTE HEALTH EFFECTS:

Eye contact may cause irritation. Prolonged or repeated skin contact may cause irritation. Processing vapors may cause eye and respiratory tract irritation. Product may contain residual amounts of a processing chemical\* in amounts <1%, but, infrequently, < 1.5%. No adverse health effects are expected. Overexposure to the residual chemical by itself could cause symptoms such as eye and respiratory tract irritation, dizziness, anesthesia, headache, nausea, or vomiting. OSHA PEL: 400 ppm. OSHA STEL: 500 ppm.

\* Specific chemical identity withheld as a trade secret (29 CFR1910.1200 (i)).

#### CHRONIC HEALTH EFFECTS:

None known. No applicable information found.

#### THRESHOLD LIMIT VALUE

None established for product by OSHA or ACGIH.

#### CARCINOGENIC STATUS

Not listed by IARC, NTP or OSHA.

#### ROUTES OF EXPOSURE

Eye/skin contact, ingestion, inhalation.

SIGNS/SYMPTOMS OF EXPOSURE      Irritation.

TARGET ORGANS                              Eyes, skin, respiratory tract.

#### MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None known specific to the product. Individuals with sensitive airways (eg., asthmatics) may react to airborne vapors. Pre-existing skin problems may be aggravated by prolonged or repeated contact with liquid.

#### EMERGENCY AND FIRST AID PROCEDURE

If irritation occurs or persists from any route of exposure, remove the affected individual from the area. See a physician.

- Eye Contact: Flush eyes with plenty of clean water for at least five (5) minutes while holding eyelids open.
- Skin Contact: Wash the affected area with plenty of soap and water.
- Ingestion: No applicable information known. Any treatment should be symptomatic.
- Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Never give anything by mouth to an unconscious person. Call a physician.

#### PRECAUTIONS FOR SAFE HANDLING AND USE

##### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Contain spill. If spilled in an enclosed area, ventilate. Do not flush liquid into public sewer or water system. Recover as much as possible for reuse. Absorb remainder with an inert material. Place into closed container and store in a safe location to await disposal. Wash the spill area with soap and water. Change contaminated clothing and launder before reuse. Wear proper personal protective clothing and equipment.

**CAUTION:** Spilled liquid and dried film are slippery. Use care to avoid falls.

##### WASTE DISPOSAL METHOD

For waste disposal purposes, this product is not known to be defined or designated as hazardous by current provisions of the Federal (EPA) Resource Conservation and Recovery Act (RCRA, 40CFR261). Incinerate liquid or dry material in a properly permitted facility in accordance with federal, state and local regulations.

##### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

- Use under well-ventilated conditions.
- Avoid skin and eye contact.
- Wash thoroughly after handling product.
- Always wash up before eating, smoking or using toilet facilities.
- Keep container closed when not in use and upright to prevent leakage.

- Store product where temperatures are between 50 - 100 degrees F. (10-38 degrees C.)
- When neutralizing or adjusting pH, follow all safety precautions regarding proper use of the chemical involved.
- Storage tanks, pumps, piping and fittings should all be of stainless steel, glass lined carbon steel, glass fiber reinforced polyester, or epoxy or phenolic coated carbon steel. Avoid use of zinc, copper, iron, aluminum or low carbon steel (these materials will cause either a breakdown of the polymer, discoloration of the resin or reduction of pH by reacting with ammonia present in some products).

### CONTROL MEASURES

#### VENTILATION

Always provide effective general and, when necessary, local exhaust ventilation to draw mist, fumes, and vapors away from workers to prevent routine inhalation. Ventilation guidelines and techniques may be found in publications such as Industrial Ventilation, American Conference of Governmental Industrial Hygienists, 6500 Glenway Avenue, Bldg. D-7, Cincinnati, OH 45211-4438.

#### RESPIRATORY PROTECTION

Not typically required. Wear an organic vapor respirator approved by NIOSH/MSHA whenever exposure to fumes, mist, or vapors cannot be avoided. Respirator use must be in accordance with the manufacturer's limitations and OSHA standard 29CFR.1910.134.

#### PROTECTIVE EQUIPMENT

- Wear eye protection (splash goggles where spilling or splashing may occur).
- Wear water resistant protective gloves.