Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification

MSDS Name: Polyacrylamide

Product Nos.: PAM

Product Use: Water treatment chemical

Company Identification:

Manufacture: HENAN XUNYU CHEMICAL CO., LTD

NO.18, SHANGWU NEIHUAN RD, ZHENGDONG NEW DIS, ZHENGZHOU, HENAN, CHINA

Emergency Number: 86-371-67110399 Information Number: 86-371-67110399

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
79-06-1	Acrylamide	<.2	201-173-7
26628-22-8	Sodium Azide	0.02	247-852-1
7732-18-5	Water	Balance	231-791-2

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: Clear viscous liquid.

Caution! May cause eye, skin, and respiratory tract irritation. Potential cancer hazard.

Target Organs: None known.

Potential Health Effects

Eye: May cause eye irritation. Skin: May cause skin irritation.

Ingestion: May cause irritation of the digestive tract. **Inhalation:** May cause respiratory tract irritation.

Chronic: Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician: Treat symptomatically.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Flash Point: Not available.

Autoignition Temperature: Not available. Explosion Limits, Lower: Not available.



Upper: Not available.

NFPA Rating: Not published.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Provide

ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Store protected from light.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Acrylamide	0.03 mg/m3 TWA (inhalable fraction and vapor); Skin - potential significant contribution to overall exposure by the cutaneous r oute	0.03 mg/m3 TWA 60 mg/m3 IDLH	0.3 mg/m3 TWA
Sodium Azide	0.29 mg/m3 Ceiling (as NaN3); 0.11 ppm Ceiling (vapor, as hydrazoic acid)	none listed	none listed
Water	none listed	none listed	none listed

OSHA Vacated PELs: Acrylamide: 0.03 mg/m3 TWA Sodium Azide: No OSHA Vacated PELs are listed for this chemical. Water: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Viscous liquid

Appearance: Clear Odor: none reported pH: Not available.

Vapor Pressure: Not available.
Vapor Density: Not available.
Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: 100 deg C

Freezing/Melting Point: 0 deg C

Decomposition Temperature: Not available.

Solubility: Soluble.



Specific Gravity/Density: Not available.

Molecular Formula: Not available.

Molecular Weight: Not available.

Section 10 - Stability and Reactivity

Chemical Stability: Stable.

Conditions to Avoid: Incompatible materials.

Incompatibilities with Other Materials: Sodium azide is incompatible with acids, ammonium chloride + trichloracetonitrile, barium carbonate, bromine, carbon disulfide, carbonyl dichloride (phosgene), cyanuric chloride, chromyl chloride,

2,5-dinitro-3-methylbenzoic acid + oleum, heavy metals, sulfuric acid, trifluoroacryloyl chloride. Polyacrylamide is incompatible with oxidizing and reducing agents, brass, aluminum

Hazardous Decomposition Products: Carbon monoxide, oxides of nitrogen, carbon dioxide, ammonia.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 79-06-1: AS3325000 CAS# 26628-22-8: VY8050000 CAS# 7732-18-5: ZC0110000

LD50/LC50:

CAS# 79-06-1:

Draize test, rabbit, eye: 100 mg/24H Moderate;

Draize test, rabbit, skin: 50 mg/3D Mild;

Draize test, rabbit, skin: 500 mg/24H Mild;

Oral, mouse: LD50 = 107 mg/kg;

Oral, rabbit: LD50 = 150 mg/kg;

Oral, rat: LD50 = 124 mg/kg;

Skin, rabbit: LD50 = 1680 uL/kg;

Skin, rat: LD50 = 400 mg/kg;

CAS# 26628-22-8:

Inhalation, mouse: LC50 = 32400 ug/m3;

Inhalation, rat: LC50 = 37 mg/m3;

Oral, mouse: LD50 = 27 mg/kg;

Oral, rat: LD50 = 27 mg/kg;

Skin, rabbit: LD50 = 20 mg/kg;

Skin, rat: LD50 = 50 mg/kg;

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg;

Carcinogenicity:

CAS# 79-06-1:

- ACGIH: A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans
- California: carcinogen, initial date 1/1/90
- NTP: Suspect carcinogen
- IARC: Group 2A carcinogen

CAS# 26628-22-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.



Epidemiology: ~~Methanol has been shown to prooduce fetoxicity in the embryo or fetus in laboratory animals. Specific

developmental abnormalities include: musculoskeletal, urogenital and cardiovascular systems,

Teratogenicity: No data available.

Reproductive Effects: No data available.

Mutagenicity: No data available. **Neurotoxicity:** No data available.

Other Studies:

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: CAS# 26628-22-8: waste number P105.

RCRA U-Series:

CAS# 79-06-1: waste number U007. Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not regulated as a hazardous material	No information available.
Hazard Class:		
UN Number:		
Packing Group:		

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 79-06-1 is listed on the TSCA inventory.

CAS# 26628-22-8 is listed on the TSCA inventory.

CAS# 7732-18-5 is listed on the TSCA inventory.

Health & Safety Reporting List

CAS# 79-06-1: Effective 10/4/82, Sunset 10/4/92

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

SARA Section 302 Extremely Hazardous Substances

CAS# 79-06-1: 1000 lb lower threshold TPQ; 10000 lb upper threshold TP Q CAS# 26628-22-8: 500 lb TPQ (This material is a reactive solid. The TP Q does not default to 10000 pounds for non-powder, non-molten, non-so lvent form)

SARA Codes

CAS # 79-06-1: immediate, delayed, sudden release of pressure, reactive.

CAS # 26628-22-8: immediate, delayed, reactive.

Section 313

Acrylamide is not at a high enough concentration to be reportable under Section 313.

Sodium Azide is not at a high enough concentration to be reportable under Section 313. No chemicals are reportable under Section 313.

Clean Air Act:

CAS# 79-06-1 is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 79-06-1 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

CAS# 26628-22-8 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:

WARNING: This product contains Acrylamide, a chemical known to the state of California to cause cancer.

California No Significant Risk Level: CAS# 79-06-1: 0.2 æg/day NSRL

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

Not available.

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 79-06-1: 3

CAS# 26628-22-8: 2

CAS# 7732-18-5: No information available.

Canada - DSL/NDSL

CAS# 79-06-1 is listed on Canada's DSL List.

CAS# 26628-22-8 is listed on Canada's DSL List.

CAS# 7732-18-5 is listed on Canada's DSL List.

Canada - WHMIS

not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

HENAN XUNYU CHEMICAL CO., LTD

Canadian Ingredient Disclosure List

CAS# 79-06-1 is listed on the Canadian Ingredient Disclosure List.

CAS# 26628-22-8 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 06/01/2010 Revision #5 Date: 06/20/2016

This information is given without any warranty or representation. It is believed to be correct but does not claim to be all inclusive and shall be used only as a guide. HENAN XUNYU CHEMICAL CO., LTD shall not be held liable for any damage resulting from gandling or for contact with the above product. It is offered solely for your consideration, investigation and verification.