

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: 26099-09-2
Product Name: Hydrolyzed Polymaleic Anhydride
Trade Name: HPMA
Company Name: Zaozhuang Kairui Water Treatment Co.,Ltd.
No.1, Fuqian South Road, Xuecheng Chemical Industrial Park, Xuecheng District, Zaozhuang City, Shandong Province,China
Web site address: www.krwater.com
Emergency Contact: +86-632-3671188
Intended Use: Intended for Industrial Use
Synonyms: Maleic Acid Homopolymer

2. HAZARDS IDENTIFICATION

Corrosive To Metals, Category 1
Serious Eye Damage/Eye Irritation, Category 1



Danger

GHS Hazard Phrases: H290 - May be corrosive to metals.
H318 - Causes serious eye damage.

GHS Precaution Phrases: P234 - Keep only in original container.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases: P390 - Absorb spillage to prevent material damage.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER/doctor.

GHS Storage and Disposal Phrases: P406 - Store in corrosive resistant/ container with a resistant inner liner.

OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations. Chronic: None.

Potential Health Effects (Acute and Chronic):

Inhalation: Inhalation of material may be harmful.

Skin Contact: May be harmful in contact with skin.

Eye Contact: Irritating, and may injure eye tissue if not removed promptly.

Ingestion: May be harmful if swallowed.

Medical Conditions Generally No information is available. Aggravated By Exposure:

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
26099-09-2	Hydrolyzed Polymaleic Anhydride	50% min

4. FIRST AID MEASURES

Emergency and First Aid Procedures:	Remove from exposure and move to fresh air immediately.
In Case of Inhalation:	Remove person to fresh air and keep comfortable for breathing. Get medical attention immediately. Give artificial respiration if victim is not breathing.
In Case of Skin Contact:	Wash with plenty of soap and water. For minor skin contact, avoid spreading material on unaffected skin. IF exposed or concerned: Get medical attention/advice.
In Case of Eye Contact:	Hold eyelids apart and flush eyes with plenty of water. After initial flushings, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and tested by medical personnel.
In Case of Ingestion:	No specific treatment is necessary, since this material is expected to be non-hazardous.
Signs and Symptoms Of Exposure:	No data available.
Note to Physician:	Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Flammability Classification:	Slight Fire Hazard
Flash Pt:	NP Method Used: Estimate
Explosive Limits:	LEL: N.D. UEL: N.D.
Autoignition Pt:	NP
Suitable Extinguishing Media:	Water spray, fog or regular foam. Use water spray, dry chemical, carbon dioxide, or chemical foam.
Unsuitable Extinguishing Media:	Use extinguishing agent suitable for type of surrounding fire.
Fire Fighting Instructions:	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Material will not burn.
Flammable Properties and Hazards:	Combustion products are toxic. Move containers from fire area if you can do it without risk.

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures:	Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield. In case of inadequate ventilation, wear respiratory protection .
Environmental Precautions:	Land Spill: Prevent additional discharge of material if possible to do so without hazard. Warn occupants and downwind areas of hazardous material release hazard and request all to stay clear. For small spills implement clean-up procedures, for large spills implement clean-up procedures and, if in a public area, immediately advise authorities. Water Spill: Prevent additional discharge of material if possible to do so without hazard. Warn occupants and downstream/downwind areas of release of corrosive hazardous material and request all to stay clear. This material will sink and is soluble/dispersible in water, it is probably not recoverable. Notify Authorities.
Steps To Be Taken In Case Material Is Released Or Spilled:	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.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:	Wash thoroughly after handling. Use with adequate ventilation. Use corrosion-resistant transfer equipment when dispensing. Store in tightly sealed container.
Precautions To Be Taken in Storing:	Store in a closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.
Other Precautions:	"Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
26099-09-2	HPMA	PEL: Not established	TLV: Not established	Not Established
Respiratory Equipment (Specify Type):	Respirator protection is not normally required. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.			
Eye Protection:	Goggles and face shield.			
Protective Gloves:	Impervious gloves.			
Other Protective Clothing:	Chemical resistant apron. Choose body protection according to the amount and concentration of the dangerous substance at the work place. This material does not have established exposure limits. Wear a positive pressure air-supplied respirator in situations where there may be potential for airborne exposure. Eye wash station in work area.			
Engineering Controls (Ventilation etc.):	There are no special ventilation requirements. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.			
Work/Hygienic/Maintenance Practices:	Wash hands before breaks and at the end of workday. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice.			
Environmental Exposure Controls:	Safety shower and eye bath. Use with adequate ventilation.			

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	<input type="checkbox"/> Gas <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Solid
Appearance and Odor:	Clear Amber. Characteristic odor.
Melting Point:	NA
Boiling Point:	101.0 C (213.8 F)
Decomposition Temperature:	NA
Autoignition Pt:	NP
Flash Pt:	NP Method Used: Estimate
Explosive Limits:	LEL: N.D. UEL: N.D.
Specific Gravity (Water = 1):	1.18 Min at 25.0 C (77.0 F)

Bulk density:	NA
Vapor Pressure (vs. Air or mm Hg):	NA
Vapor Density (vs. Air = 1):	NA
Evaporation Rate:	NA
Solubility in Water:	Complete
Saturated Vapor Concentration:	NA
Viscosity:	< 100 CPS at 25.0 C (77.0 F)
Octanol/Water Partition Coefficient:	Unknown
pH(1% solution):	2-3
Percent Volatile:	~ 48.00 % by weight.
VOC / Volume:	NA

10. STABILITY AND REACTIVITY

Reactivity:	Avoid strong oxidizers and alkalis.
Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability:	flames and sparks. ignition sources, Incompatible materials.
Incompatibility - Materials To Avoid:	Oxidizing agents. None known.
Hazardous Decomposition Or Byproducts:	Carbon oxides, Hazardous decomposition products formed under fire conditions.
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	Hazardous Polymerization will not occur at room temperature.

11. TOXICOLOGICAL INFORMATION

Toxicological Information:	Epidemiology: No data available. Teratogenicity: No data available. Reproductive Effects: Mutagenicity: Neurotoxicity: Other Studies: CAS# 26099-09-2:
Irritation or Corrosion:	Acute toxicity, LD50, Oral, Rat, 2500. MG/KG. Result: Behavioral: Convulsions or effect on seizure threshold. Gastrointestinal:Hypermotility, diarrhea. Nutritional and Gross Metabolic:Changes in:Body temperature increase. - Angewandte Chemie, International Edition in English., VCH Pub., Inc., 303 NW 12th Ave., Deerfield Beach, FL 33441, Vol/p/yr: 14,94, 1975 Acute toxicity, LD50, Oral, Mouse, 4600. MG/KG. Result: Behavioral: Tremor. Behavioral: Muscle contraction or spasticity. - Farmaco, Edizione Pratica., For publisher information, see FRMCE8, Pavia Italy, Vol/p/yr: 25,721, 1970

Acute toxicity, LD50, Intraperitoneal, Mouse, 39.00 MG/KG.

Result:

Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Mydriasis (pupillary dilation).

Behavioral: Convulsions or effect on seizure threshold.

Gastrointestinal: Nausea or vomiting.

- Journal of Medicinal Chemistry., American Chemical Soc., Distribution Office Dept. 223, POB POB 57136, West End Stn., Washington, DC 20037, Vol/p/yr: 21,652, 1978

Acute toxicity, LD50, Oral, Species: Guinea pig, 2.000 GM/KG.

Result:

Behavioral: Convulsions or effect on seizure threshold.

- Archives Internationales de Pharmacodynamie et de Therapie., Heymans Institute of Pharmacology, De Pintelaan 185, B-9000, Ghent Belgium, Vol/p/yr: 114,258, 1958

No information available.

No information available.

Symptoms related to Toxicological Characteristics:

Chronic Toxicological Effects:

No information available.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
26099-09-2	Hydrolyzed Polymaleic Anhydride	n.a.	n.a.	n.a.	n.a.

12. ECOLOGICAL INFORMATION

General Ecological Information:

Observe all federal, state, and local environmental regulations. No information found. Toxicity: no data available. Freely miscible in water. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Bioaccumulative Potential:

No information found.

Mobility in Soil:

No information found.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

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. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Discarded product, as sold, would be considered a RCRA Characteristic Hazardous Waste as it meets the definition /characteristic of corrosivity (designated as D002).

Waste Disposal Method:

D002

14. TRANSPORT INFORMATION

GHS Classification: Corrosive To Metals, Category 1 - Warning! May be corrosive to metals
 Serious Eye Damage/Eye Irritation, Category 1 - Danger! Causes serious eye damage

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s. (Hydrolyzed Polymaleic Anhydride)
DOT Hazard Class: CORROSIVE
UN/NA Number: UN3265 **Packing Group:** III



LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Corrosive liquid, acidic, organic, n.o.s. (Hydrolyzed Polymaleic Anhydride)

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Corrosive liquid, acidic, organic, n.o.s. (Hydrolyzed Polymaleic Anhydride)

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
26099-09-2	Hydrolyzed Polymaleic Anhydride	No	No	No

This material meets the EPA Yes No Acute (immediate) Health Hazard
'Hazard Categories' defined Yes No Chronic (delayed) Health Hazard
for SARA Title III Sections Yes No Fire Hazard
311/312 as indicated: Yes No Sudden Release of Pressure Hazard
 Yes No Reactive Hazard

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
26099-09-2	Hydrolyzed Polymaleic Anhydride	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No

CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
26099-09-2	Hydrolyzed Polymaleic Anhydride	Canadian DSL: Yes; Canadian NDSL: No; Mexico INSQ: Yes; Australia ICS: No; China IECSC: Yes; Japan ENCS: Yes - (6)-921; Korea ECL: Yes - KE-03964; Philippines ICCS: Yes; Taiwan TCSCA: Yes; REACH: Yes - (P)

Regulatory Information Statement: Regulatory information provided in this SDS was prepared for this product and is to be used only for the product in its present form, If this material is used as a component in another material or altered in any way, the information in this SDS may no longer be applicable. This document was generated for the purpose of distributing health, safety and environmental data.

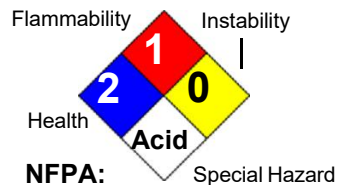
16. OTHER INFORMATION

Revision Date: 2022-10-1

Hazard Rating System:

HEALTH	3
FLAMMABILITY	0
PHYSICAL	0
PPE	npqr

HMIS:



Additional Information About This Product: SDS Data Field Acronym Legend:

- NA- Not Available
- NP- Not Applicable
- NR- Not Required
- PR- Proprietary
- TS- Trade Secret.

Company Policy or Disclaimer:

MANUFACTURER DISCLAIMER: NOTICE: We believe that the information contained on this Safety Data Sheet is accurate. The suggested procedures are based on experience as of the date of publication. They are not necessarily either all- inclusive or fully adequate in every circumstance. Also, these suggestions should not be confused with or followed in violation of applicable laws, regulation, rules or insurance requirements. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.