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Material Safety Data Sheet

1 Identification of the substance/preparation and of the company/undertaking

.Trade name: KY Liquid humic acid 18%

.Application of the substance: Use for water-soluble fertilizer

.Manufacturer/Supplier: Zhangjiagang Kangyuan New Material Co.Ltd.

25 Changxing Road, Economic Development Zone, Zhangjiagang City

Tel: +86-512-5632 8208 Fax: +86-512-5632 8202

.Further information obtainable from: Zhangjiagang Kangyuan New Material Co.Ltd.

.Information in case of emergency: Zhangjiagang Kangyuan New Material Co.Ltd.

.E-Mail: Sales@Kangyuanchina.com

.Contact: Zhang Bin

2 Composition/information on ingredients

.Description: Mixture of substances listed below with additions.

.Components Number:	CAS Number	Approximate(%)by Wt.
Humic acid	1415-93-6	12%
Fulvic acid	479-66-3	4%
Potassium monoxide	12136-45-7	3.5%
Water	7732-18-5	80.5%

3 Hazards identification

.NFPA ratings (scale 0 - 4)



Health = 1; Fire = 0; Reactivity = 0

.HMIS-ratings (scale 0 - 4)



Health = 1; Fire = 0; Reactivity = 0

Potential Acute Health Effects:

.Primary Entry Routes: Swallowed, Inhalation, Skin, and eye contact

.Inhalation: The volatile smell have a small amount of inhaled will be no risk to human, Much Inhalation will lead

dizziness, nausea, etc.





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.Eyes: Slightly hazardous by the following route of exposure: of eye contact (irritant).

.Skin: No known acute effects of this product resulting from skin contact, but it will irritant the damaged skin and cause inflammation, in light of good industrial hygiene, exposure to any chemical should be kept to a minimum.

.Swallowed: The product is expected a harmful can not to Ingestion. Ingestion will irritation the mouth and digestive tract, after ingestion will have vomiting, abdominal pain, loss of appetite.

.Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

Repeated or prolonged exposure is not known to aggravate medical condition.

4 First aid measures

Generally not hazardous in normal handling, however good laboratory practices should always be used. Avoid long term exposure to skin or by inhalation.

- **.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.
- .Eye: 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. Get medical aid If irritation develops or persists.
- **.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.
- .Medical conditions aggravated by exposure: No medical conditions are known to be aggravated by these products.
- .Notes to Physician: None

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. Non-combustible, substance itself does not burn but may decompose upon heating to produce irritating, corrosive and/or toxic fumes.

- .Flammable class: 0
- .Suitable extinguishing media: Water, CO2, Dry Chemicals, Foam-Fog
- .Fire/Explosion Hazards: Negligible fire hazard when exposed to heat or flame.
- .Fire Fighting Procedure: Wear self contained breathing apparatus meeting NIOSH standards.
- .Other information: Wear self-contained breathing apparatus and complete personal protective equipment when potential for exposure to products of combustion exists.

6 Accidental release measures

.Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow evacuating through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.



7 Handling and storage

The regulations relating to storage remises apply to workshop where the product is handled:

- .Handling: Removal of products need to wear protective gloves, handled with care when handling apply good manufacturing practice & industrial hygiene practices. Observe good personal hygiene, and do not eat, drink or smoke whilst handling. Wear protective goggles and gloves when handling material. Clean cloths, must be worn. Observe all warnings and precautions listed for the product.
- .Storage: Store in a cool & dry area, Keep container tightly sealed, Keep air contact to a minimum.
- .Further information about storage condition: None.

8 Exposure controls/personal protection

- .Ventilation and Engineering controls: No special ventilation and engineering controls are required.
- **.Respiratory Protection:** No special respiratory protection is required for use of these products. If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHS Standard, applicable U.S. State regulations, or the Canadian CSA standard.
- .Body Protection: General protective clothing.
- .Protective Gloves: Choose Rubber or plastic gloves with elbow-length gauntlet.
- .Eye Protection: Unnecessary, When necessary wear chemical goggles or face shield.
- .PEL (OSHA): None Established
 .TLV (ACGIH): None Established

9 Physical and chemical properties

.General Information		
Form:	Liquid	
Color:	Brown	
Odor:	Odorless	
.Change in condition		
Melting point/Melting range:	Not available	
Boiling point/Boiling range:	Not available	
.Self-igniting:	Product is not self-igniting	
.Danger of explosion:	Not available	
.Density:		
.Relative density:	1(Water=1)	
.Vapor density:	Not available	
.Evaporation rate	Not available	
.Solubility in/Miscibility with		
Water:	Soluble	
.PH-Value:	Not available	
.Viscosity (mPa.s):		
Dynamic:	Not available	



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10 Stability and reactivity

.Chemical Stability: Stable under normal temperatures and pressures.

.Decomposition Products: carbon dioxide, carbon monoxide, water vapor, and trace volatile organic compounds.

.Materials with which substance is incompatible: Not available.

.Hazardous Polymerizations: Will not occur.

11 Toxicological information

.Toxicity to Animals:

LD50: Not available. LC50: Not available.

.Other Toxic Effects on Humans: Not available.

.Special Remarks on Toxicity to Animals: Not available.

.Special Remarks on Chronic Effects on Humans: Not available.

.Special Remarks on other Toxic Effects on Humans: Not available.

12 Ecological information

.Ecotoxicity: Not available.

.Products of Biodegradation: None hazardous short term degradation products are not likely.

. Water Danger/Protection: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

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.

. Waste Disposal Methods: Disposal must be done as territory and /or local government regulations. Waste management information will help to receive the best results.

.Disposal of packaging: Dispose of according to local regulations.

14 Transport information

.DOT Classification: Not a DOT controlled material (United States).

.UN Number: Not available.
.Packing Group: Not available.

.Special Provisions for Transport: Not applicable.

.Marine Pollutant: Yes

.TDG Classification: Not controlled under TDG (Canada).

.ADR/RID Classification: Not controlled under ADR(Europe)

.IMO/IMDG Classification: Not Controlled under IMDG.

.ICAO/IATA Classification: Not controlled under IATA.

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15 Regulatory information

US FEDERAL

TSCA: Not listed on the TSCA inventory.

Health & Safety Reporting List: None of the chemicals are on the Health & Safety Reporting List.

CERCLA Hazardous Substances and corresponding RQs: None of the chemicals in this material have an RQ.

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.

SARA Section 302 Extremely Hazardous Substances: None of the chemicals in this product have a TPQ.

Section 313: No chemicals are reportable under Section 313.

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

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

Candidate List of Substances of very high concern (SVHC) according to ECHA (19/12/2011)

None of the ingredients is listed.

REACH Regulation Annex XVII Restriction(9/2/2012): None of the ingredients is listed.

REACH Regulation Annex XIV Authorization List(15/2/2012): None of the ingredients is listed.

European Labeling in Accordance with EC Directives

Risk Phrases:

22 Harmful if swallowed.

36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

- 2 Keep out of the reach of children.
- 25 Avoid contact with eyes.
- 46 If swallowed, seek medical advice immediately and show this container or label.

16 Other information

The contents and format of this MSDS are in accordance with ISO Commission Directive ISO11014:2009.

DISCLAIMER OF LIABILITY

The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handing, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may be applicable.

.Emergency Telephone Number: +86-139 1569 6411

.Department issuing MSDS: Zhangjiagang Kangyuan New Material Co.Ltd.

.Contact: Zhang Bin