

## Safety Data Sheet

# Super absorbent polymer

Version : V1.0.0.2

Report No. : HGNM17IGJ8

Creation Date : 2023/03/05

Revision Date : 2023/03/06

\*Prepared according to UN GHS (the 6th revised edition)

## 1 Identification of the chemical and supplier

### Product identifier

Product Name	Super absorbent polymer
CAS No.	9003-04-7 ( Acrylic acid polymer )
EC No.	618-349-8 ( Acrylic acid polymer )
Molecular Formula	(C <sub>3</sub> H <sub>3</sub> NaO <sub>2</sub> ) <sub>n</sub> ( Acrylic acid polymer )

### Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Diaper, sanitary and other hygienic products; agriculture; water treatment.
Uses advised against	No special note.

### Details of the supplier of the Safety Data Sheet

Name of the company	DONGYING NAXING TRADING CO.,LTD.
Address of the company	Guangrao International Expo Center E2, Dongying, Shandong'
Post code	257300
Telephone number	0546-6899989
Fax number	0546-6899989
E-mail address	teresa@naxingchina.com

### Emergency phone number

Emergency phone number	0546-6899989
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## 2 Hazards identification

### Hazard classification according to GHS

Serious Eye Damage/Irritation	Category 2A
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### Label elements

Hazard pictograms	
Signal word	<b>Warning</b>

### Hazard statements

H319	Causes serious eye irritation
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## Precautionary statements

### ◆ Prevention

<b>P264</b>	Wash ... thoroughly after handling.
<b>P280</b>	Wear protective gloves/protective clothing/eye protection/face protection.

### ◆ Response

<b>P337+P313</b>	If eye irritation persists: Get medical advice/attention.
<b>P305+P351+P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### ◆ Storage

<b>Storage</b>	Not applicable
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### ◆ Disposal

<b>Disposal</b>	Not applicable
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## Hazard description

### ◆ Physical and chemical hazards

	Solid, toxic smoke/fumes in a fire.
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### ◆ Health hazards

<b>Inhaled</b>	Cough.
<b>Ingestion</b>	Accidental ingestion of the product may be harmful to the health of the individual.
<b>Skin Contact</b>	Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.
<b>Eye</b>	Redness.

### ◆ Environmental hazards

	Please refer to 12th chapter of SDS.
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## 3 Composition/information on ingredients

Component	Cas No.	EC No.	Concentration (weight percent, %)
Acrylic acid polymer	9003-04-7	618-349-8	> 95
Water	7732-18-5	231-791-2	< 5

## 4 First aid measures

### Description of first aid measures

<b>General advice</b>	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
<b>Eye contact</b>	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
<b>Skin contact</b>	Remove contaminated clothes.

<b>Ingestion</b>	Rinse mouth.
<b>Inhalation</b>	Fresh air, rest.
<b>Protecting of first-aiders</b>	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

### | Most important symptoms and effects, both acute and delayed

1	Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.
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### | Indication of any immediate medical attention and special treatment needed

1	Treat symptomatically.
2	Symptoms may be delayed.

## 5 Firefighting measures

### | Extinguishing media

<b>Suitable extinguishing media</b>	Use extinguishing media suitable for surrounding area.
<b>Unsuitable extinguishing media</b>	There is no restriction on the type of extinguisher which may be used.

### | Specific hazards arising from the substance or mixture

1	Containers may explode when heated.
2	Slight fire hazard when exposed to heat or flame.

### | Advice for firefighters

1	As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
2	Fight fire from a safe distance, with adequate cover.
3	Prevent fire extinguishing water from contaminating surface water or the ground water system.

## 6 Accidental release measures

### | Personal precautions, protective equipment and emergency procedures

1	Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
2	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
3	Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.

### | Environmental precautions

1	Prevent further leakage or spillage if safe to do so.
2	Discharge into the environment must be avoided.

### | Methods and materials for containment and cleaning up

1	Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
2	Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
3	Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

## 7 Handling and storage

### Precautions for handling

1	Handling is performed in a well ventilated place.
2	Wear suitable protective equipment.
3	Avoid contact with skin and eyes.
4	Keep away from heat/sparks/open flames/ hot surfaces.

### Precautions for storage

1	Keep containers tightly closed.
2	Keep containers in a dry, cool and well-ventilated place.
3	Keep away from heat/sparks/open flames/ hot surfaces.
4	Store away from incompatible materials and foodstuff containers.

## 8 Exposure controls/personal protection

### Control parameters

#### ◆ Occupational Exposure limit values

<b>Occupational Exposure limit values</b>	No information available
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#### ◆ Biological limit values

<b>Biological limit values</b>	No information available
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#### ◆ Monitoring methods

1	EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
2	GBZ/T 160.1~GBZ/T 160.81-2004 Determination of toxic substances in workplace air ( Series standard ).

### Engineering controls

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.
3	Use explosion-proof electrical/ventilating/lighting/equipment.
4	Set up emergency exit and necessary risk-elimination area.

### Personal protection equipment

<b>General requirement</b>	
<b>Eye protection</b>	Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US)).
<b>Hand protection</b>	Wear protective gloves ( such as butyl rubber ) , passing the tests according to EN 374(EU),US F739 or AS/NZS 2161.1 standard.
<b>Respiratory protection</b>	If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.
<b>Skin and body protection</b>	Wear fire/flame resistant/retardant clothing and antistatic boots.

## 9 Physical and chemical properties

**Physical and chemical properties**

Appearance	White particles
Odor	Slight odor
Odor threshold	No information available
pH	5.5~8.5
Melting point/freezing point(°C)	No information available
Initial boiling point and boiling range(°C)	>35
Flash point(Closed cup, °C)	Not applicable
Evaporation rate	Not applicable
Flammability	Not flammable
Upper/lower explosive limits[%(v/v)]	Upper limit : No information available ; Lower limit : No information available
Vapor pressure	Not applicable
Relative vapour density(Air = 1)	Not applicable
Relative density(Water=1)	0.6~0.9
Solubility(mg/L)	Insoluble in water ( Water into gelatinous )
n-octanol/water partition coefficient	No information available
Auto-ignition temperature(°C)	No information available
Decomposition temperature(°C)	No information available
Kinematic viscosity	Not applicable
Particle characteristics	No information available

**10 Stability and reactivity****Stability and reactivity**

Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical stability	Stable under proper operation and storage conditions.
Possibility of hazardous reactions	In contact with active metals (alkali metals, Na, Ca etc.) causes a reaction and release hydrogen.
Conditions to avoid	Incompatible materials, heat, flame and spark.
Incompatible materials	Alkali, sodium, calcium, and other active metal, halogen, metal oxide, nonmetal oxide, acyl halide and metal phosphide.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**11 Toxicological information****Acute toxicity**

Component	Cas No.	LD <sub>50</sub> (oral)	LD <sub>50</sub> (dermal)	LC <sub>50</sub> (inhalation,4h)
Acrylic acid polymer	9003-04-7	> 40000mg/kg(Rat)	No information available	No information available

**Carcinogenicity**

ID	Cas No.	Component	IARC	NTP
1	9003-04-7	Acrylic acid polymer	Not Listed	Not Listed
2	7732-18-5	Water	Not Listed	Not Listed

**Others**

Super absorbent polymer	
Skin corrosion/irritation	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Causes serious eye irritation
Skin sensitization	Based on available data, the classification criteria are not met
Respiratory sensitization	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Based on available data, the classification criteria are not met
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Reproductive toxicity(additional)	Based on available data, the classification criteria are not met

**12 Ecological information****Acute aquatic toxicity**

Acute aquatic toxicity	No information available
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**Chronic aquatic toxicity**

Chronic aquatic toxicity	No information available
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**Persistence and degradability**

Component	Cas No.	Persistence (water/soil)	Persistence (air)
Water	7732-18-5	Low	Low

**Bioaccumulative potential**

Component	Cas No.	Bioaccumulative potential	comments
Water	7732-18-5	Low	Log K <sub>ow</sub> =-1.38

**Mobility in soil**

Component	Cas No.	Mobility in soil	Soil Organic Carbon-Water Partitioning Coefficient (K <sub>oc</sub> )
Water	7732-18-5	Low	14.3

**Results of PBT and vPvB assessment**

Component	Cas No.	Results of PBT and vPvB assessment ( according to (EC) No 1907/2006)
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<b>Acrylic acid polymer</b>	9003-04-7	not PBT/vPvB
<b>Water</b>	7732-18-5	not PBT/vPvB

## 13 Disposal considerations

### Disposal considerations

<b>Waste chemicals</b>	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
<b>Contaminated packaging</b>	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
<b>Disposal recommendations</b>	Refer to section 13.1 and 13.2.

## 14 Transport information

### Label and Mark

<b>Transporting Label</b>	Not applicable
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### IMDG-CODE

<b>IMDG-CODE</b>	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
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### ICAO/IATA-DG

<b>ICAO/IATA-DG</b>	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
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### UN-ADR

<b>UN-ADR</b>	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
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## 15 Regulatory information

### International chemical inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS	ENCS
Acrylic acid polymer	×	✓	✓	✓	✓	✓	×	✓	✓
Water	✓	✓	✓	✓	✓	✓	✓	✓	×

【EINECS】 European Inventory of Existing Commercial Chemical Substances

【TSCA】 United States Toxic Substances Control Act Inventory

【DSL】 Canadian Domestic Substances List

【IECSC】 China Inventory of Existing Chemical Substances

【NZIoC】 New Zealand Inventory of Chemicals

【PICCS】 Philippines Inventory of Chemicals and Chemical Substances

【KECI】 Existing and Evaluated Chemical Substances

【AICS】 Australia Inventory of Chemical Substances

【ENCS】 Existing And New Chemical Substances

#### Note

“√” Indicates that the substance included in the regulations

“×” That no data or included in the regulations

## 16 Others

## Information on revision

Creation Date	2023/03/05
Revision Date	2023/03/06
Reason for revision	-

## Reference

[1]IPCS: The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>.

[2]IARC , website: <http://www.iarc.fr/>.

[3]OECD: The Global Portal to Information on Chemical Substances, website:  
[http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en).

[4]CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>.

[5]NLM: ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>.

[6]EPA: Integrated Risk Information System, website: <http://cfpub.epa.gov/iris/>.

[7]U.S. Department of Transportation: ERG, website: <http://www.phmsa.dot.gov/hazmat/library/erg>.

[8]Germany GESTIS-database on hazard substance, website: <http://gestis-en.itrust.de/>.

## Abbreviations and acronyms

**CAS** –Chemical Abstracts Service

**PC-STEL**- Short term exposure limit

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC<sub>50</sub>** - Lethal Concentration 50%

**NOEC** -No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

**BCF** - Bioconcentration factor (BCF)

**IMDG**-International Maritime Dangerous Goods

**UN**-The United Nations

**NFPA**-National Fire Protection Association

**CMR** - Carcinogens, mutagens or substances toxic to reproduction

**PC-TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer

**PNEC** –Predicted No Effect Concentration

**LD<sub>50</sub>** - Lethal Dose 50%

**EC<sub>50</sub>** - Effective Concentration 50%

**POW** - Partition coefficient Octanol: Water

**vPvB** - very Persistent, very Bioaccumulative

**ICAO/IATA**-International Civil Aviation Organization/International Air Transportation Association

**ACGIH**-American Conference of Governmental Industrial Hygienists

**OECD**-Organization for Economic Co-operation and Development

## Disclaimer

This Safety Data Sheet (SDS) was prepared according to UN GHS (the 6th revised edition). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user' s reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.