

MSDS Report

No. SH9244064/ CHEM

Date: Jan. 25, 2010

Page 1 of 1

Client's name: Shandong Huadi United New Material Co., Ltd. /
Shandong Huadi Architecture Science &
Technology Co., Ltd.

Client's address: No. 1101, Suite A, Sanjianyiyuan, No. 22 Minsheng
Street, Jinan, Shandong Province, P.R.China

SGS Ref No. : SHD002934978

Product Name: Crystal Soil (SAP Super Absorbent Polymer)

End Uses: Flower Planting and Home Decoration

Composition/Ingredient: Sodium polyacrylate (95%), water (5%).

Job Receiving Date: Dec.29, 2009

Preparation Period: Dec.30, 2009– Jan.8, 2010

Service Requested

Material Safety Data Sheet for the Product

SUMMARY

The contents and format of this MSDS are in accordance with 29 CFR 1910.1200(g).

Signed for and on behalf of
SGS-CSTC Chemical Laboratory



Sandy Hao
Lab Manager

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Material Safety Data Sheet

29 CFR 1910.1200

Printing date 12/31/2009

Reviewed on 12/31/2009

1 Identification of substance

- **Product details**

- **Trade name:** Crystal Soil (SAP Super Absorbent Polymer)

- **Application of the substance / the preparation** Flower Planting and Home Decoration

- **Manufacturer/Supplier:**

Shandong Huadi United New Material Co., Ltd. / Shandong Huadi Architecture Science & Technology Co., Ltd.

No. 1101, Suite A, Sanjianyiyuan, No. 22 Minsheng Street, Jinan, Shandong Province, P.R.China

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- **Information department:**

Shandong Huadi United New Material Co., Ltd. / Shandong Huadi Architecture Science & Technology Co., Ltd.

- **Emergency information:**

Pang Yiping / Hu Shuang

Tel: 86-531-85311696

- **Email** sdhuadi@yahoo.com.cn

- **Reference Number:** SHD002934978; SH9244064/CHEM

2 Composition/Data on components

- **Chemical characterization**

- **Description:** Mixture: consisting of the following components.

- **Dangerous components:**

9003-04-7	2-Propenoic acid, homopolymer, sodium salt	95.0%
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- **Non dangerous components:**

7732-18-5	water, distilled, conductivity or of similar purity	5.0%
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- **Remark:**

2-Propenoic acid, homopolymer, sodium salt (CAS No. 9003-04-7)

synonym: Sodium polyacrylate

3 Hazards identification

- **Hazard description:**

Irritant

- **Information pertaining to particular dangers for man and environment:**

This material (or substance or mixture) is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Irritating to eyes.

- **Classification system:**

The classification is according to the latest edition of the OSHA Hazard Communication Standard (29 CFR 1910.1200), and extended by company and literature data.

- **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 0

Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**

HEALTH	1
FIRE	0
REACTIVITY	0

Health = 1

Fire = 0

Reactivity = 0

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4 First aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse mouth with water.
Consult a physician.

5 Fire fighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:**
Ensure adequate ventilation
Wear protective clothing.
Avoid contact with eyes and skin.
- **Measures for environmental protection:**
Do not allow to enter sewers/ surface or ground water.
Do not allow product to reach sewage system or any water course.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Pick up mechanically.
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Wear protective clothing.
Avoid contact with eyes and skin.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:**
Do not store together with acids.
Store away from foodstuffs.
Store away from oxidizing agents.
- **Further information about storage conditions:**
Store in a cool place.
Keep receptacle tightly sealed.
Keep out of the reach of children.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

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Trade name: Crystal Soil (SAP Super Absorbent Polymer)

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- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· General Information

Form:	Gel
Color:	Transparent
Odor:	Odorless

· Change in condition

Melting point/Melting range:	Not available
Boiling point/Boiling range:	Not available

Flash point:	Not available
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Flammability (solid, gaseous):	Not available
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Ignition temperature:	Not available
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Auto igniting:	Product is not selfigniting.
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Danger of explosion:	Product does not present an explosion hazard.
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· Explosion limits:

Lower:	Not available
Upper:	Not available

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· Oxidizing properties	Not available
· Vapor pressure:	Not available
· Density:	Not available
· Relative density	Not available
· Vapour density	Not available
· Evaporation rate	Not available
· Solubility in / Miscibility with Water:	Not available
· pH-value:	Not available
· Segregation coefficient (n-octanol/water):	Not available
· Viscosity:	
Dynamic:	Not available

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

9003-04-7 2-Propenoic acid, homopolymer, sodium salt

Oral	LD50	> 40000mg/kg (rat)
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- **Primary irritant effect:**

- **on the skin:** Irritating effect possible.

- **on the eye:** Irritating effect.

- **Sensitization:** Sensitization possible.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

12 Ecological information

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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Trade name: Crystal Soil (SAP Super Absorbent Polymer)

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- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Identification number:** -
- **Packing group:** -
- **Hazardous substance:** -
- **Poison inhalation hazard:** -
- **Proper shipping name (technical name):** -
- **Label:** -

- **Land transport ADR/RID (cross-border):**
- **ADR/RID class:** -
- **Danger code (Kemler):** -
- **UN-Number:** -
- **Packaging group:** -
- **Label:** -
- **Description of goods:** -

- **Maritime transport IMDG:**
- **IMDG Class:** -
- **UN Number:** -
- **Label:** -
- **Packaging group:** -
- **EMS Number:** -
- **Marine pollutant:** No
- **Propper shipping name:** -

- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -
- **UN/ID Number:** -
- **Label:** -
- **Packaging group:** -
- **Propper shipping name:** -

15 Regulations

- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

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· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

· **Product related hazard informations:**

This material (or substance or mixture) is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

· **Hazard symbols:**

Irritant

· **Risk phrases:**

Irritating to eyes.

· **Safety phrases:**

Keep out of the reach of children.

Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

If swallowed, seek medical advice immediately and show this container or label.

Dispose of this material and its container to hazardous or special waste collection point.

· **National regulations:**

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

16 Other information

The contents and format of this MSDS/SDS are in accordance with 29 CFR 1910.1200(g).

DISCLAIMER OF LIABILITY

The information in this MSDS/SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness.

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USA