

## Safety Data Sheet



### Gellant Carbopol UTS 940

#### 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Name of product:	<b>Gellant Carbopol UTS 940</b>
1.2 INCI name:	CARBOMER
1.3 № CAS:	9003-01-4
1.4 Chemical family:	polyacrylic acid
1.5 Company details:	
Supplier:	<b>UTS-SCANDINAVIA AB</b>
Address:	<b>UTS (Shanghai) Trading Co., Ltd.</b> T2-302 SOHO Tianshan Plaze No.1717 Tianshan Road 200051 Shanghai, P.R.China.
Tel.:	(86 21) 62076507
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1.6 Issue date:	June 2018

#### 2. HAZARDS IDENTIFICATION

2.1 GHS classification:	Hazardous for water (acute hazard) cat. 3
2.2 Hazard classes and categories:	Water environment (acute hazard) cat. 3
2.3 H-phrases:	H402
2.4 Label elements GHS:	
2.5 Substance/mixture:	substance
2.6 Hazard pictograms:	no
2.7 Signal word:	no
2.8 H-statements:	hazardous for water environment
2.9 Precaution statements:	
In case of fire:	Use CO <sub>2</sub> , dry powder, foam, water spray or water mist. Carbon dioxide can be ineffective in large fire due to the lack of cooling effects, which can lead to re-ignition. Do not use water jet from a sleeve or other methods, creating a dust cloud.
Skin contact:	Rinse gently with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Consult the doctor.
Contact with eye:	Wash carefully during several minutes. Call the doctor.
Inhalation	If symptoms occur: Contact the poison center or a doctor. If breathing is difficult, give oxygen. In case of respiratory arrest, perform artificial respiration.
Ingestion	Call the toxicological center or the doctor, if you feel unwell. Treat symptomatically.
2.10 Storage:	Store in a cool, dry, well ventilated place in a closed container.
2.11 Disposal:	Observe the current regulation.

*The full information regarding the health hazards is available in Section 11.*

### 3. CHEMICAL COMPOSITION INFORMATION OF THE PRODUCT

#### 3.1 Chemical composition:

Chemical name	Synonyms	№ CAS	Weight %
Carbomer	Carbomer	9003-01-4	≥97,3
Water	Water	7732-18-5	до 100

#### 3.2 Hazardous components:

Chemical name	№ CAS	Бec %	Cancerogenity
Residual acrylic acid	79-10-7	≤0,25	Not determined
Residual benzene	71-43-2	0,50	Not determined

### 4. FIRST AID MEASURES

- 4.1 Eye contact: Immediately begin affluent rinsing of the eyes with one percent (1%) saline solution, rinse for five (5) minutes, keeping the eyelids apart. If there is no saline solution, rinse with plenty of clean water for fifteen (15) minutes. Consult the doctor. Under the influence of water (moisture), this product swells into a gel-like film, which can be difficult to remove from the eye, using water alone.
- 4.2 Skin contact: Rinse with soap and water. In case of irritation, consult the doctor. Wash contaminated clothing before reuse.
- 4.3 Inhalation: Move the victim to fresh air if symptoms occur. If breathing is difficult, give oxygen. In case of respiratory arrest, perform artificial respiration. Consult a doctor if irritation persists or toxicological symptoms are observed.
- 4.4 Ingestion: Treat symptomatically. Call the doctor.
- 4.5 Recommendations on protection of response group members: When providing first aid, protect yourself from exposure to chemicals and from blood-borne diseases with gloves, masks and eye protection means. When performing artificial respiration, use a mouthpiece, a breathing bag, an Ambu device or another device. After the first aid, wash the affected area of skin with soap and water.
- 4.6 Note to doctor: Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

- 5.1 Flash point: Not applicable
- 5.2 Fire- and explosion hazard: Min. explosive concentration 130 g/m<sup>3</sup>  
Min. ignition energy >0.03 J  
Max. pressure growth rate 379.21 bar/s at 501 g/m<sup>3</sup>  
Max. explosion pressure 4.83 bar at 501 g/m<sup>3</sup>  
Volumetric resistivity 0.32 x 10<sup>+15</sup> ohms-cm  
Explosion intensity 2.02 (strong)  
Dust cloud ignition temperature 520 °C
- This product has a high volume resistance and tends to accumulate static electricity, which can be discharged in the form of a spark. A spark can serve as a source of ignition for the mixtures of vapors of solvent with air. If you add this product to a solvent, make sure that appropriate safety measures are followed, such as

inerting of flammable vapors. As with any organic dust, a suspension of fine particles in the air at a critical concentration in the presence of a source of ignition can ignite and/or explode. Dust can ignite under the effect of electrostatic discharge, electric arc, sparks, welding torch, cigarettes, open flame or other significant source of heat. As a precaution, apply standard safety measures when handling fine organic powders.

- 5.3 Extinguishing media CO<sub>2</sub>, fire dry powder, foam, water spray, water mist. Carbon dioxide can be ineffective in large fire due to lack of cooling effects, which can lead to re-ignition. Do not use water jet from the sleeve or other methods, creating a dust cloud.
- 5.4 Unsuitable extinguishing media: Not determined
- 5.5 Fire-extinguishing procedures: Use a full protective suit, including a full-face autonomous positive pressure breathing apparatus, jacket, trousers, gloves and boots.
- 5.6 Special hazards The solid substance does not emit flammable vapors under normal conditions. The material can form an explosive mixture of organic dust with air. For more information, see in Section 10

## 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Individual precaution measures, protection equipment and procedures for emergency situations Use personal protection equipment. Caution: wet material creates a risk of falling on a slippery surface.
- 6.2 Environment protection Do not allow to enter the environment. Do not allow to enter the soil, ditches, sewers, reservoirs and groundwater.
- 6.3 Methods for cleaning: Collect the solid for further processing and/or disposal. Do not allow dust formation. Rinse the leakage area with detergent.

## 7. HANDLING AND STORAGE

- 7.1 Handling Keep away from heat, sparks, control lights, static electricity and open flames. Do not allow dust formation. Keep the production area clean. Do not drink, do not taste, do not swallow this product. Do not inhale dust, aerosol, mist, spray, smoke, vapors. Use with sufficient ventilation. Ground and secure containers when transferring material. Avoid prolonged contact with the skin. Wash contaminated clothing before reuse. Dispose of the packaging in compliance with the applicable regulations.
- 7.2 Storage: Do not allow entering the environment. Store in a cool, dry, well-ventilated place. Keep the container closed.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Exposure limits			
Component	№ CAS	Long-term (8 h TWA)	Short-term (15 min.)
EC	Not applicable		

8.2 Other exposure limits:	The industry-recommended permissible exposure limit for inhalable polyacrylate dust is 0.05 mg/m <sup>3</sup>
8.3 Engineering controls:	If dust is formed during processing, local exhaust ventilation is recommended. Avoid inhalation by providing effective general and, if necessary, local exhaust ventilation. Avoid high concentrations of dust in the air and accumulation of dust on the equipment.
8.4 Individual protection equipment	
Respiratory protection	Use respirator with a HEPA filter if the recommended exposure limits are exceeded. Consult with a specialist to select suitable protective equipment taking into account the specific conditions of working with the material.
Eye protection	Protection glasses or chemical protection goggles.
Protection of hands	Observe the industrial hygiene rules, do not allow contact with skin. Use chemical resistant protective gloves
Clothes –recommendations	Long-sleeve clothes
Hygiene	Wash thoroughly after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Physical condition:	White powder
9.2 Smell:	Weak vinegar
9.3 pH (0.5% pH in water):	3.0-4.5
9.4 Evaporation rate:	Non-volatile
9.5 Water solubility:	The material swells in water
9.6 Drying loss:	≤2.0%
9.7 Vapour pressure:	Not applicable
9.8 Melting point:	No data available
9.9 Vapour density:	Non-volatile
9.10 Bulk density:	≥30 g/ml
9.11 Flash point:	Not applicable
9.12 Auto-ignition temperature:	520 °C
9.13 Explosion hazard:	Dust may form explosive mixtures with air.

## 10. STABILITY AND REACTIVITY

10.1 Chemical stability:	The material is usually stable at moderately elevated temperatures and pressures
10.2 Incompatible materials	Heat may generate if the polymer comes in contact with strong base materials such as ammonia, sodium hydroxide or strong base amines.
10.3 Polymerisation	Will not occur
10.4 Decomposition temperature:	Not determined
10.5 Thermal decomposition:	Smoke, carbon monoxide, carbon dioxide, aldehydes and other incomplete combustion products.
10.6 Unacceptable conditions:	Not determined

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Acute effects

Eye irritation	Eye irritation is not expected. Based on information on similar materials. Particles can cause mechanical irritation. Solid particles (powder or dust) in the eyes can cause pain and irritation.
Skin irritation	Primary skin irritation is not expected. Based on information on similar products. In sensitive individuals, contact dermatitis may occur under extreme and unusual conditions of prolonged and repeated contact, such as extensive exposure at elevated temperatures and retention in clothes. This effect may be the result of hygroscopic properties of the product, of friction or of pH.
Irritation of respiratory tract	Inhalation of dust can cause coughing, sputum formation and shortness of breath.
Toxicity, dermal	LD50 rabbit >5000 mg/kg. Based on information on similar materials.
Toxicity by inhalation	Avoid inhaling dust. Animal studies show that inhalation of polyacrylate particles can cause inflammatory changes in the lungs.
Toxicity, oral	LD50 rat >10000 mg/kg. Based on information on similar materials.
Sensibilisation, dermal	Not expected. Based on information on similar materials.
Sensibilisation, inhalation	There are no data indicating the likelihood of sensitization by inhalation.
Aspiration hazard	Not determined

### 11.2 Chronic effects

Chronic toxicity	A two-year study of the effects of inhaled water-absorbing sodium polyacrylate dust on rats showed the occurrence of inflammation, hyperplasia and tumors. When exposed to 0.05 mg/m <sup>3</sup> , no negative effects were observed. In addition, long-term medical monitoring of workers potentially exposed to the product did not reveal such an effect on the lungs as was observed in rats. Nevertheless, inhalation should be prevented by applying appropriate protective measures and observing the recommended exposure limits of 0.05 mg/m <sup>3</sup> .
Cancerogenicity	Not included in the list of carcinogens or potential carcinogens of NTP, IARC and OSHA.
Mutagenicity	There are no data indicating mutagenicity or genotoxicity of the product or of components contained in the product in the amount of over 0.1%.
Reproductive toxicity	There are no data indicating reproductive toxicity of the product or of components contained in the product in the amount of over 0.1%.
Teratogenicity	There are no data indicating teratogenicity of the product or of components contained in the product in the amount of over 0.1%.

### 11.3 Additional information

Existing skin diseases may worsen with prolonged or repeated exposure. Persons with sensitive respiratory tract (for example, asthmatics) may react to vapors. This material quickly absorbs moisture and can become thick and gel-like when in contact with the mucous membranes of eyes, or when inhaled into the nasal passages

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity for environment

Toxicity for fresh-water fish:	Acute LC50=100-1000 mg/l based on data on the components.
Toxicity for fresh-water invertebrates	Acute LC50=100-1000 mg/l based on data on the components. Chronic effects are expected with 100-1000 mg/l based on data on the components.
Inhibition of water-plants growth	Acute LC50=100-1000 mg/l based on data on the components.
Toxicity for bacteria	Acute LC50=100-1000 mg/l based on data on the components.

## 12.2 Transformation in the environment

Biodegradation	At least 25% of the components of this product demonstrate limited biodegradation based on OECD 301 test data. At least 25% of the components of this product demonstrate limited biodegradation based on OECD 302 test data.
Bioaccumulation	Less than 1.0% potentially accumulate in the environment.

## 13. DISPOSAL CONSIDERATIONS

13.1 Disposal of product	Dispose of in compliance with applicable regulations.
Dispose of the packaging in compliance with applicable regulations.	

## 14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID)	Not classified as dangerous material or a cargo dangerous for transportation
14.2 Sea transport (IMDG):	Not regulated by IMDG
14.3 Air transport (ICAO):	Not regulated ICAO
14.4 Marine pollutant:	Нет данных

## 15. REGULATORY INFORMATIONS

### Chemical lists:

AICS:	All the components are included or excepted from the list.
DSL:	All the components are included or excepted from the list.
IECSC:	All the components are included or excepted from the list.
MITI:	All the components are included or excepted from ENCS.
KECL:	All the components are included or excepted from the list.
EINECS:	All the components are included or excepted from the list.
PICCS:	All the components are included or excepted from the list.
TSCA:	All the components are included or excepted from TSCA.

## 16. OTHER INFORMATION

16.1 NFPA codes:	Health	1
	Fire	1
	Reactivity	0
	Special	Not established
16.3 HMIS codes	Health	0
	Fire	1
	Reactivity	0