

Huatai Insoluble Sulfur

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION	
Manufacturer Shandong Yanggu Huatai Chemical Co., Ltd No. 217, Qinghexi Road, Yanggu County Shandong Province, China	Emergency Contact Chemtrec: 1-800-424-9300 (USA) (1)330-542-8400 (outside USA)
Trade Name(s): Huatai HD OT 20, HS OT 20	Synonyms: Insoluble sulfur, oil treated
Chemical Name: Polymeric Sulfur	
Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available.	Application of the substance/the preparation: Chemical intermediate.
Issued By: Sovereign Chemical Company 4040 Embassy Parkway, Suite 190 Akron, OH 44333 330-542-8400 According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS	Date of Issue: November 1, 2018

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
 Classification according to Regulation (EC) No 1272/2008



GHS07
 Skin Irrit. 2 H315 Causes skin irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant
 R38 Irritating to skin.

Information concerning particular hazards for human and environment
 The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
 Classification system
 The classification is according to the latest editions of the EU-lists and extended by company and literature data.
 The classification is in accordance with the latest editions of international substances lists and is supplemented by information from technical literature and by information provided by the company.

2.2 Label elements
 Labeling according to Regulation (EC) No 1272/2008
 The substance is classified and labeled according to the CLP regulation.
 Hazard pictograms



GHS07

Signal word: Warning

Hazard statements

H315 Causes skin irritation.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash thoroughly after handling.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

Hazard description

WHMIS-symbols



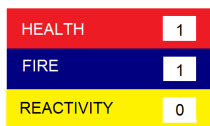
D2B – Toxic material causing other toxic effects

NFPA ratings (scale 0-4)



Health = 1
Fire = 1
Reactivity = 0

HMIS ratings (scale 0-4)



Health = 1
Fire = 1
Reactivity = 0

HMIS Long Term Health Hazard Substances: None of the ingredients is listed.

2.3 Other hazards

Results of PBT and vPvB assessment



PBT: Not applicable.

vPvB: Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components

CAS: 9035-99-8 EINECS: 231-722-6	Polymeric Sulfur	>50%
CAS: 7704-34-9 EINECS: 231-722-6 Index number: 016-094-00-1	sulfur  Xi R38  Skin Irrit. 2, H315	10-25%
CAS: 64742-52-5 EINECS: 265-155-0 Index number: 649-465-00-7	Distillates (petroleum), hydrotreated heavy naphthenic Carc. Cat. 2	≤ 10%

Additional information: For the wording of the listed risk phrases refer to section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General information: No special measures required.

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

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

Gastric or intestinal disorders.

Coughing.

Hazards: No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat skin and mucous membrane with antihistamine and corticoid preparations.

In cases of irritation to the lungs, initial treatment with cortical steroid inhalants.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons, unsuitable extinguishing agents: None.

5.2 Special hazards arising from the substance or mixture: During heating or in case of fire poisonous gases are produced.

5.3 Advice for firefighters

Protective equipment

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information: Cool endangered receptacles with water fog or haze.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment.

Ensure adequate ventilation.

6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up

Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Prevent formation of dust.

Ensure good ventilation/exhaustion at the workplace.

Any unavoidable deposit of dust must be regularly removed.

Information about fire and explosion protection: Dust can combine with air to form an explosive mixture.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles

Store in a cool location.

Avoid storage near extreme heat, ignition sources or open flame.

Protect from humidity and water.

Provide ventilation for receptacles.

Information about storage in one common storage facility

Store away from foodstuffs.

Store away from oxidizing agents.

Further information about storage conditions

Store in cool, dry conditions in well-sealed receptacles.

Store receptacle in a well-ventilated area.

Protect from humidity and water.

7.3 Specific end use(s): No further relevant information available.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

Ingredients 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.

DNELs: No further relevant information available.

PNECs: No further relevant information available.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

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 and skin.

Respiratory protection

Use suitable respiratory protective device in case of insufficient ventilation.

Use suitable respiratory protective device when high concentrations are present.

For spills, respiratory protection may be advisable.

Protection of hands



Protective gloves

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

Neoprene gloves

Nitrile rubber, NBR

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 cannot 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



Safety glasses

Body protection: Protective work clothing

Limitation and supervision of exposure into the environment: No further relevant information available.

Risk management measures

See Section 7 for additional information.

No further relevant information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

General Information

Appearance Form: Powder. Color: Yellow.	Change in Condition Melting Point/Melting Range: Undetermined. Boiling Point/Boiling Range: 444 °C (831 °F).
Odor: Characteristic.	Octanol/Water Partition Coefficient: Not determined.
Odor threshold: Not determined.	Solvent Content: Organic solvents: Not determined.
pH value: Not applicable.	Solid content: Not determined.
Vapor pressure: Not applicable.	Flash point: 157 °C (315 °F).
Density at 20 °C: 1.92 g/cm ³ .	Flammability (solid, gaseous): Not determined.
Relative density: Not determined.	Ignition temperature: 260 °C (500 °F).
Vapor density: Not applicable.	Decomposition temperature: Not determined.
Evaporation rate: Not applicable.	Self-igniting: Product is not self-igniting.

Solubility in / Miscibility with water: Insoluble.	Danger of explosion: Product does not present an explosion hazard.
Viscosity Dynamic: Not applicable. Kinematic: Not applicable.	Explosion limits Lower: 30 g/m ³ . Upper: >2000 g/m ³ .

9.2 Other information No further relevant information available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

10.2 Chemical stability

Thermal decomposition / conditions to be avoided

Keep away from heat and direct sunlight.

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

Reacts with oxidizing agents.

Reacts with strong alkali.

Reacts with amines

As the product is supplied it is not capable of dust explosion; however, enrichment with fine dust causes risk of dust explosion.

10.4 Conditions to avoid

Keep away from heat and direct sunlight.

Store away from oxidizing agents.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: Sulfur oxides (SO_x)

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Primary irritant effect

on the skin: Irritant to skin and mucous membranes.

on the eye: Slight irritant effect on eyes.

Sensitization: No sensitizing effects known.

Additional toxicological information

The product shows the following dangers according to the calculation method of the General EU

Classification

Guidelines for Preparations as issued in the latest version: Irritant

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability: No further relevant information available.

12.3 Bioaccumulative potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available.

Additional ecological information

General notes

This statement was deduced from the properties of the single component.

Due to available data on eliminability/decomposition and bioaccumulation potential a prolonged damage of the environment is unlikely.

Water hazard class 1 (German Regulation) (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.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects: No further relevant information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Recommendation

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

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

Uncleaned packaging

Recommendation: Disposal must be made according to official regulations.

14. TRANSPORTATION INFORMATION

14.1 UN-Number

DOT, ADR, ADN, IMDG, IATA Not regulated.

14.2 UN proper shipping name

DOT, ADR, ADN, IMDG, IATA Not regulated.

14.3 Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA Class Not regulated.

14.4 Packing group

DOT, ADR, IMDG, IATA Not regulated.

- 14.5 Environmental hazards
 - Marine pollutant No
- 14.6 Special precautions for user Not applicable
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
UN "Model Regulation"

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
United States (USA)

SARA Section 355 (extremely hazardous substances)	None of the ingredients is listed.
SARA Section 313 (Specific toxic chemical listings)	None of the ingredients is listed
TSCA (Toxic Substances Control Act)	All ingredients are listed.
Proposition 65 (California)	
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
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
Carcinogenic Categories	
EPA (Environmental Protection Agency)	None of the ingredients is listed
IARC (International Agency for Research on Cancer)	None of the ingredients is listed
TLV (Threshold Limit Value established by ACGIH)	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
Canada	
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

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H315 Causes skin irritation.

R38 Irritating to skin.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)