



Product: HOAT
SDS No: 311020
Revision: 1.0

Safety Data Sheet

Section 1 - Product and Company Information

Product Name: HOAT
Product Code: 311020
Company: CSBio(Shanghai) Ltd
EMERGENCY CONTACTS: Dr. Simon Zhu 0086-21-50781655

Section 2 - Hazards Identification

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)



GHS02 Flame

Flam. Sol. 1 H228 Flammable solid.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

Hazards not otherwise classified No information known.

Label elements

GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)

Hazard pictograms



GHS02



GHS07

Signal word Danger

Hazard statements

H228 Flammable solid.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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

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P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS classification

B4 - Flammable solid

D2B - Toxic material causing other toxic effects



Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)



Health (acute effects) = 1

Flammability = 3

Physical Hazard = 2

Health (acute effects) = 1

Flammability = 3

Physical Hazard = 2

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.



Section 3 - Composition/Information on Ingredients

Substance Name	HOAT
CAS No.	39968-33-7
Formula	C ₅ H ₄ N ₄ O

Section 4 - First Aid Measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

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In case of eye contact

Wash off with soap and plenty of water. Consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

Section 5 - Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NOx)

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Carbon oxides, Nitrogen oxides (NOx)

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wetbrushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

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Keep container tightly closed in a dry and well-ventilated place.

Storage class (TRGS 510): Non Combustible Solids

Keep in a Cool dry place(Away from light, $\leq 25^{\circ}\text{C}$)

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8 - Exposure Controls / PPE

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

No special environmental precautions required.

Section 9 - Physical/Chemical Properties

Appearance:	White to off white crystalline powder
Molecular Weight:	136.1
pH:	N/A
BP/BP Range:	N/A
MP/MP Range:	210.0-217.0°C
Freezing Point:	N/A
Vapor Pressure:	N/A

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Vapor Density:	N/A
Saturated Vapor Conc.	N/A
SG/Density:	N/A
Bulk Density:	N/A
Odor Threshold:	N/A
Volatile%:	N/A
VOC Content:	N/A
Water Content:	N/A
Solvent Content:	N/A
Evaporation Rate:	N/A
Viscosity:	N/A
Surface Tension:	N/A
Partition Coefficient:	N/A
Decomposition Temp.:	N/A
Flash Point:	N/A
Explosion Limits:	N/A
Flammability:	N/A
Autoignition Temp:	N/A
Refractive Index:	N/A
Optical Rotation:	N/A
Miscellaneous Data:	N/A
Solubility:	N/A



Section 10 - Stability and Reactivity

- 10.1 Reactivity
 - No data available
- 10.2 Chemical stability
 - Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions
 - No data available
- 10.4 Conditions to avoid
 - No data available
- 10.5 Incompatible materials
 - Strong oxidizing agents
- 10.6 Hazardous decomposition products
 - Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)

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Other decomposition products - No data available

In the event of fire: see section 5

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

No data available

Inhalation: No data available

Dermal: No data available

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 - Ecological Information

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- 12.1 Toxicity
No data available
- 12.2 Persistence and degradability
No data available
- 12.3 Bioaccumulative potential
No data available
- 12.4 Mobility in soil
No data available
- 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
- 12.6 Other adverse effects
No data available

Section 13 - Disposal Considerations

- 13.1 Waste treatment methods
Product
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging
Dispose of as unused product.

Section 14 - Transport Information

UN-Number
DOT, IMDG, IATA UN1325
UN proper shipping name
DOT Flammable solids, organic, n.o.s. (1-Hydroxy-7-azabenzotriazole)
IMDG, IATA FLAMMABLE SOLID, ORGANIC, N.O.S. (1-Hydroxy-7-azabenzotriazole)

Transport hazard class(es)
DOT



Class 4.1 Flammable solids, self-reactive substances and solid desensitised explosives.

Label 4.1

Class 4.1 (F1) Flammable solids, self-reactive substances and solid desensitised
Explosives



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Label 4.1

IMDG, IATA

Class 4.1 Flammable solids, self-reactive substances and solid desensitised explosives.

Label 4.1

Packing group

DOT, IMDG, IATA II

Environmental hazards: Not applicable.

Special precautions for user Warning: Flammable solids, self-reactive substances and solid desensitised explosives

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

Transport/Additional information:

DOT

Marine Pollutant (DOT): No

UN "Model Regulation": UN1325, Flammable solids, organic, n.o.s. (1-Hydroxy-7-azabenzotriazole), 4.1, II

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)

Hazard pictograms



GHS02



GHS07

Signal word Danger

Hazard statements

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Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations

This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted

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to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This

product must not be used for commercial purposes or in formulations for commercial purposes.

SARA Section 313 (specific toxic chemical listings) Substance is not listed.

California Proposition 65

Prop 65 - Chemicals known to cause cancer Substance is not listed.

Prop 65 - Developmental toxicity Substance is not listed.

Prop 65 - Developmental toxicity, female Substance is not listed.

Prop 65 - Developmental toxicity, male Substance is not listed.

Information about limitation of use: For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.

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

Section 16 - Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. CSBio (Shanghai) Ltd., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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