

SAFETY DATA SHEET

TURBO-HIB H2S

Issuing Date 16-Aug-2016

Revision Date 16-Aug-2016

Revision Number 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name TURBO-HIB H2S

Other means of identification

Product Code(s) 2027

UN-No. UN2733

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use For industrial use only

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name Turbo-Chem Int'l, INC.

Supplier Address 106 West Saul
Scott
Louisiana
70583
US

Supplier Phone Number Phone:(337-235-3098)
Fax:(337) 235-0101

Supplier Email info@turbochem.com

Emergency telephone number

Chemical Emergency Phone Number CHEMTREC: +1-703-527-3887 (INTERNATIONAL)
1-800-424-9300 (NORTH AMERICA)

Company Emergency Phone Number (800-259-7838)

2. HAZARDS IDENTIFICATION


Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 1
Flammable Liquids	Category 3

GHS Label elements, including precautionary statements

Emergency Overview

Signal word	Danger		
Hazard Statements			
Fatal if inhaled			
May cause an allergic skin reaction			
Causes damage to organs			
Flammable liquid and vapor			
			
Appearance	Amber	Physical state	Liquid
			Odor No data available

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Wear respiratory protection
 Contaminated work clothing should not be allowed out of the workplace
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof electrical/ ventilating/ lighting/ equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge
 Wear protective gloves/protective clothing/eye protection/face protection
 Keep cool

Precautionary Statements - Response

IF exposed: Call a POISON CENTER or doctor/physician

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention

Skin

If skin irritation or rash occurs: Get medical advice/attention
 Wash contaminated clothing before reuse
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Fire

In case of fire: Use CO₂, dry chemical, or foam for extinction

Spill

Absorb spillage to prevent material damage
Collect spillage

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

Other information

May be harmful if swallowed
Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION

Interactions with Other Chemicals

Use of alcoholic beverages may enhance toxic effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Hexahydro-1,3,5-tris(2-hydroxyethyl)-S-triazine	4719-04-4	10 - 25

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First aid measures**General Advice**

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction. If symptoms persist, call a physician.
Inhalation	Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. If not breathing, give artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.
Ingestion	Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects Coughing and/ or wheezing. Difficulty in breathing. Itching. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray, fog or alcohol-resistant foam. Move containers from fire area if you can do it without risk. Dike fire control water for later disposal; do not scatter the material. Dry chemical, CO₂, alcohol-resistant foam or water spray.

Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

May be ignited by heat, sparks or flames. Vapors can form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard.

Uniform Fire Code	Sensitizer: Liquid Highly Toxic: Liquid Flammable Liquid: I-C Combustible Liquid: II
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Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

Some of these materials may react violently with water. Do not get water inside containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Full encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Stop leak if you can do it without risk.

Other Information Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment A vapor suppressing foam may be used to reduce vapors. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Use clean non-sparking tools to collect absorbed material. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Use personal protection equipment. Avoid contact with skin and eyes. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992) See section 15 for national exposure control parameters

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Skin and body protection Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant apron. Impervious gloves. Antistatic boots.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. For environmental protection, remove and wash all contaminated protective equipment before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical state	Liquid		
Appearance	Amber	Odor	No data available
Color	No information available	Odor Threshold	No information available
<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH	9	None known	
Melting / freezing point	No data available	None known	
Boiling point / boiling range	No data available	None known	
Flash Point	49 C / 120 F	None known	
Evaporation Rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limit in Air			
Upper flammability limit	No data available		
Lower flammability limit	No data available		
Vapor pressure	No data available	None known	
Vapor density	No data available	None known	
Specific Gravity	1.0208	None known	
Water Solubility	Soluble in water	None known	
Solubility in other solvents	No data available	None known	

Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	None known
Oxidizing properties	No data available	None known

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Excessive heat. Heat, flames and sparks.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Inhalation	Specific test data for the substance or mixture is not available. Fatal if inhaled. (based on components).
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Component Information**Information on toxicological effects**

Symptoms Coughing and/ or wheezing. Difficulty in breathing. Itching. Rashes. Hives.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	May cause sensitization in susceptible persons. May cause sensitization by skin contact.
Mutagenic Effects	No information available.
Carcinogenicity	Contains no ingredient listed as a carcinogen.
Reproductive toxicity	No information available.
STOT - single exposure	Based on classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE). If this product is a mixture, the classification is not based on toxicology studies for this product, but is based solely on toxicology studies for ingredients found within this product. Detailed substance and/or ingredient information may be provided in other sections of this SDS. Target organs effects listed in this document may result from a single overexposure to this product.
STOT - repeated exposure	No information available.
Chronic Toxicity	Effects from this product caused by acute exposure may cause permanent damage to target organs and/or may cause chronic conditions.
Target Organ Effects	Respiratory system. Systemic Toxicity. Skin. Central nervous system (CNS). Eyes. Gastrointestinal tract (GI).
Aspiration Hazard	No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
3,394.00 mg/kg
ATEmix (dermal)
30,000.00 mg/kg (ATE)
ATEmix (inhalation-gas)
70,000.00 ppm (4 hr)
ATEmix (inhalation-dust/mist)
0.34 mg/L
ATEmix (inhalation-vapor)
300.00 ATEmix

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Persistence and Degradability

No information available.

Bioaccumulation

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods	This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).
Contaminated Packaging	Dispose of contents/containers in accordance with local regulations.
US EPA Waste Number	D001 U154

California Hazardous Waste Codes 331

This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. TRANSPORT INFORMATION

DOT

UN-No.	UN2733
Proper Shipping Name	AMINES, FLAMMABLE, CORROSIVE, N.O.S.
Hazard Class	3
Subsidiary class	8
Packing Group	III
Description	UN2733, AMINES, FLAMMABLE, CORROSIVE, N.O.S. (METHYL ALCOHOL), 3 (8),
Emergency Response Guide Number	III 132

TDG

UN-No.	UN2733
Proper Shipping Name	AMINES, FLAMMABLE, CORROSIVE, N.O.S.
Subsidiary class	8
Description	UN2733, AMINES, FLAMMABLE, CORROSIVE, N.O.S. (METHYL ALCOHOL), 3 (8), III

MEX

UN-No.	UN2733
Proper Shipping Name	AMINES, FLAMMABLE, CORROSIVE, N.O.S.
Hazard Class	3

Subsidiary class	8
Packing Group	III
Description	UN2733, AMINES, FLAMMABLE, CORROSIVE, N.O.S. (METHYL ALCOHOL), 3 (8), III
ICAO	
UN-No.	UN2733
Proper Shipping Name	AMINES, FLAMMABLE, CORROSIVE, N.O.S.
Hazard Class	3
Subsidiary class	8
Packing Group	III
Description	UN2733, AMINES, FLAMMABLE, CORROSIVE, N.O.S. (METHYL ALCOHOL), 3 (8), III
IATA	
UN-No.	UN2733
Proper Shipping Name	AMINES, FLAMMABLE, CORROSIVE, N.O.S.
Hazard Class	3
Subsidiary class	8
Packing Group	III
ERG Code	3C
Description	UN2733, AMINES, FLAMMABLE, CORROSIVE, N.O.S. (METHYL ALCOHOL), 3 (8), III
IMDG/IMO	
UN-No.	UN2733
Proper Shipping Name	AMINES, FLAMMABLE, CORROSIVE, N.O.S.
Hazard Class	3
Subsidiary class	8
Packing Group	III
EmS-No.	F-E, S-C
Description	UN2733, AMINES, FLAMMABLE, CORROSIVE, N.O.S. (METHYL ALCOHOL), 3 (8), III,(49°C C.C.)
RID	
UN-No.	UN2733
Proper Shipping Name	AMINES, FLAMMABLE, CORROSIVE, N.O.S.
Hazard Class	3
Packing Group	III
Classification code	FC
Description	UN2733, AMINES, FLAMMABLE, CORROSIVE, N.O.S. (METHYL ALCOHOL), 3 (8), III 8
ADR/RID-Labels	III 8
ADR	
UN-No.	UN2733
Proper Shipping Name	AMINES, FLAMMABLE, CORROSIVE, N.O.S.
Hazard Class	3
Packing Group	III
Classification code	FC
Tunnel restriction code	(D/E)
Description	UN2733, AMINES, FLAMMABLE, CORROSIVE, N.O.S. (METHYL ALCOHOL), 3 (8), III 8
ADR/RID-Labels	III 8
ADN	
UN-No.	UN2733
Proper Shipping Name	AMINES, FLAMMABLE, CORROSIVE, N.O.S.
Hazard Class	3
Packing Group	III
Classification code	FC
Special Provisions	274, 544
Description	UN2733, AMINES, FLAMMABLE, CORROSIVE, N.O.S. (METHYL ALCOHOL), III
Hazard Labels	
Limited Quantity	
	3 + 8
	5 L

Ventilation VE01

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
 DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

International Regulations

Mexico

National occupational exposure limits

Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class

Not determined

16. OTHER INFORMATION

NFPA	Health Hazards 4	Flammability 2	Instability 0	Physical and Chemical Hazards - Personal Protection X
HMIS	Health Hazards 4 *	Flammability 2	Physical Hazard 0	

Prepared By Product Stewardship
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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet