

# Mixgran<sup>®</sup> HMT 80

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION	
Manufacturer: Shandong Yanggu Huatai Chemical Co., LTD No.399, Qinghexi Road Yanggu County, Shandong, China 252300	Emergency Contact: Chemtrec: 1-800-424-9300 (USA) (1)330-542-8400 (outside USA)
Trade Name(s): Mixgran HMT 80, HEXA-80	Chemical Name: Hexamethylenetetramine
Relevant identified uses of the substance or mixture and uses advised against: None determined.	Identified uses: Used as a rubber vulcanization accelerator.
Issued By: Sovereign Chemical Company According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS	Date of Issue: April 15, 2024

## 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture  
 Information in accordance with US 29 CFR 1910.1200 (Hazcom 2012) and Regulation (EC) No 1272/2008

Flammable Solid, Category 3      H228  
 Skin Sens., Category 1          H317

The most important adverse physicochemical effects: Flammable solid.

The most important adverse human health effects: May cause an allergic skin reaction.

The most important adverse environmental effects: Not applicable.

Hazard Pictograms



Signal Word(S): Warning

Hazard Statement:

H228: Flammable solid.

H317: May cause an allergic skin reaction.

Precautionary Statement:

P210: Keep away from heat/sparks/open flames/hot surfaces – no smoking.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting/equipment.

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.  
 P272: Contaminated work clothing should not be allowed out of the workplace.  
 P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P363: Wash contaminated clothing before reuse.  
 P370 + P378: In case of fire: Use dry chemical, water mist, alcohol-resistant foam for extinction.  
 P501: Dispose of contents/container to local/regional/national/ international regulation.

Other hazards: Not available (PBT, vPvB, Substance is an endocrine disruptor etc.)

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Mixture

Chemical Name	CAS No	EC No	Weight %	Classification
hexamethylenetetramine	100-97-0	202-905-8	80%	Skin Sens. 1 H317 Flammable 3 H228
EPDM	23627-24-9	N/A	20%	N/A

The remaining unspecified ingredients are impurities and are not hazardous.

**4. FIRST AID MEASURES**

Description of first aid measures: In all cases of doubt, or when symptoms persist, seek medical attention.

In case of inhalation: Remove from exposure and move to fresh air. Get medical aid.

In case of skin contact: Flush skin with plenty of soap and water for at least 15 minutes. Get medical aid.

In case of eyes contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

In case of ingestion: Rinse mouth and drink plenty of water. Do not induce vomiting. Get medical aid.

Most important symptoms and effects, both acute and delayed May cause an allergic skin reaction.

Indication of any immediate medical attention and special treatment needed If skin irritation or rash occurs, get medical advice/attention.

**5. FIRE FIGHTING MEASURES**

Extinguishing media

Suitable extinguishing media: Use dry chemical, water mist, alcohol-resistant foam.

Unsuitable extinguishing media: Full water jet.

Special hazards arising from the substance or mixture

Hazardous decomposition products: carbon monoxide, carbon dioxide, nitrogen oxides.

Advice for fire-fighters: Wear a self-contained breathing apparatus in pressure-demand MSHA/ NIOSH (approved or equivalent), and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Use personal protective equipment. Avoid breathing dust. Ensure adequate ventilation.

For emergency responders: Wear an appropriate NIOSH/MSHA approved respirator if mist, vapor or dust is generated.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods for Containment and Cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. Flush area with water.

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 information on disposal.

## 7. HANDLING AND STORAGE

Precautions for safe handling

Protective measures: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate ventilation at places where dust is formed. Use personal protective equipment.

Advice on general occupational hygiene: Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities: Store in in a dry, cool and well-ventilated area. Keep container tightly closed and sealed until ready for use. Keep away from sources of ignition.

Specific end use(s): Not applicable.

## 8. EXPOSURE CONTROLS - PERSONAL PROTECTION

Control parameters

Occupational exposure limits: Not available.

Additional exposure limits under the conditions of use: Not available.

DNEL/DMEL and PNEC-Values: Not available.

Exposure controls

Appropriate engineering controls: Use adequate ventilation to keep airborne concentrations low.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Tightly sealed goggles.

Hand protection: Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: Butyl latex, 0.7 mm, 480 min., 60 min., i.e. protective glove made by www.kcl.de. This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions. Requirements can vary as a function of the use. Therefore, it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Body protection: Impermeable protective overall.

Respiratory protection: Half mask with a particle filter P2 (European Norm EN 143 = former DIN 3181).

Thermal hazards: Wear suitable protective clothing to prevent heat.

Environmental exposure controls:

Avoid discharge into the environment. According to local regulations, Federal and official regulations.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form: Solid particles. Color: Cream.	Change in Condition Melting Point/Melting Range: Not available. Boiling Point/Boiling Range: Not available.
Odor: Not determined.	Octanol/Water Partition Coefficient: -2.18 (20 °C)
Odor threshold: Not determined	Solvent Content: Organic solvents: Not determined
pH: Not applicable	Solids content: Not determined
Vapor Pressure: < 0.001mm Hg	Flash point: Not applicable
Density at 20 °C: Not applicable.	Flammability (solid, gaseous): Flammable.
Relative density: Not available.	Ignition temperature: Not determined
Vapor Density: Not applicable	Decomposition temperature: Not determined
Evaporation rate Not applicable	Self-igniting: Product is not self-igniting.
Solubility in / Miscibility with water at 20 °C: Insoluble.	Danger of explosion: Product does not present an explosion hazard.
Viscosity Dynamic: Not applicable Kinematic: Not applicable	Explosion limits Lower: Not determined. Upper: Not determined

## 10. STABILITY AND REACTIVITY

Reactivity: The substance is stable under normal storage and handling conditions.

Chemical stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: Incompatible materials. Incompatible materials. Sources of ignition.

Incompatible materials: Strong oxidizing agents, Acids.

Hazardous decomposition products: Carbon monoxide, carbon dioxide, nitrogen oxides.

**11. TOXICOLOGICAL INFORMATION**

Toxicokinetic, metabolism and distribution

Non-human toxicological data: Not available

Information on toxicological effects

Acute toxicity:

LD50(Oral, Rat): > 20000 mg/kg bw

LD50(Dermal, Rat): > 2000 mg/kg bw

LC50(Inhalation, Rat): Not available

Skin corrosion/Irritation: Not classified.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT- single exposure: Not classified

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

**12. ECOLOGICAL INFORMATION**

Toxicity

Acute toxicity	Time	Species	Method	Evaluation	Remarks
LC50	96h	Fish	OECD 203	N/A	N/A
EC50	48h	Daphnia	OECD 202	N/A	N/A
EC50	72h	Algae	OECD 201	N/A	N/A

Persistence and degradability: Not available.

Bioaccumulative potential: Not available.

Mobility in soil: Not available.

Results of PBT&vPvB assessment: Not available.

Other adverse effects: Not available.

**13. DISPOSAL CONSIDERATIONS**

Waste treatment methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Product / Packaging disposal

If empty container retains product residues, all label precautions must be observed. Return for reuse or dispose according to national or local regulations.

**14. TRANSPORTATION INFORMATION**

UN-Number	
DOT, ADR, ADN, IMDG, IATA	1325
UN proper shipping name	
DOT, ADR, ADN, IMDG, IATA	FLAMMABLE SOLID, ORGANIC, N.O.S. (contains hexamethylenetetramine)
DOT, ADR, ADN, IMDG, IATA Class	4.1
Packing group	
DOT, ADR, IMDG, IATA	III
Environmental hazards	No
Marine pollutant	No
Special precautions for user	See Section 2
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	IBC08

**15. REGULATORY INFORMATION**

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

United States (USA)	
SARA Section 355 (extremely hazardous substances)	Substance is not listed.
SARA Section 313 (Specific toxic chemical listings)	Substance is not listed.
TSCA (Toxic Substances Control Act)	Substance is listed.
Proposition 65 (California)	
Chemicals known to cause cancer	Substance is not listed.
Chemicals known to cause reproductive toxicity for females	Substance is not listed.
Chemicals known to cause reproductive toxicity for males	Substance is not listed.
Chemicals known to cause developmental toxicity	Substance is not listed.

Carcinogenic Categories	
EPA (Environmental Protection Agency)	Substance is not listed.
IARC (International Agency for Research on Cancer)	Substance is not listed.
TLV (Threshold Limit Value established by ACGIH)	Substance is not listed.
NIOSH-Ca (National Institute for Occupational Safety and Health)	Substance is not listed.
OSHA-Ca (Occupational Safety & Health Administration)	Substance is not listed.
Canada	
Canadian Domestic Substances List (DSL)	Substance is listed.
Canadian Ingredient Disclosure list (limit 0.1%)	Substance is not listed.
Canadian Ingredient Disclosure list (limit 1%)	Substance is not listed.

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.