

Accelerator TBSI

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION	
Manufacturer Shandong Yanggu Huatai Chemical Co., LTD No.217, Qinghexi Road Yanggu County, Shandong, China 252300	Emergency Contact Chemtrec: 1-800-424-9300 (USA) (1)330-542-8400 (outside USA)
Trade Name(s): Accelerator TBSI	Chemical Name: N-(1,1-dimethylethyl)bis(2-benzothiazolesulfen)amide)
Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available.	Application of the substance/the preparation: Rubber compounding.
Issued By: Sovereign Chemical Company	Date of Issue: November 1, 2018
According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS	

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation:

H400, H



GHS09 Environment
 Aquatic Acute 1
 Aquatic Chronic 1

H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.



GHS07
 Skin Sens. 1

H317 May cause an allergic skin reaction.

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



Xn; Harmful
 R43

May cause sensitization by skin contact.



N; Dangerous for the environment
 R 50/53

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation:

H410. The product is classified and labeled according to the CLP regulation.

Hazard pictograms



This pictogram only applicable for EU regulations. Not for use in the United States (OSHA GHS)



GHS07



GHS09

Signal word: Warning

Hazard statements: The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H410.

- H317 May cause an allergic skin reaction.
- H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

- P280 Wear protective gloves and eye protection.
- P273 Avoid release to the environment.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P261 Avoid breathing dust.
- P333+P313 IF skin irritation or rash occurs: Get medical advice/attention.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P363 Wash contaminated clothing before reuse.
- P391 Collect spillage.
- P501 Dispose of contents/container to local/regional/national/international regulation.

Hazard description

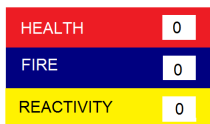
WHMIS-symbols

NFPA ratings (scale 0-4)



Health = 0
Fire = 0
Reactivity = 0

HMIS ratings (scale 0-4)



Health = 0
Fire = 0
Reactivity = 0

HMIS Long Term Health Hazard Substances: Substance is not listed.

2.3 Other hazards

Results of PBT and vPvB assessment

- PBT: Not applicable.
- vPvB: Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

CAS No., Description: 3741-80-8, N-(1,1-dimethylethyl)bis(2-benzothiazolesulfen)amide
Identification number(s): · EC number: 202-409-1

4. FIRST AID MEASURES

4.1 Description of first aid measures

After inhalation

- Supply fresh air; consult doctor in case of complaints.
- Provide oxygen treatment if affected person has difficulty breathing.
- In case of irregular breathing or respiratory arrest, provide artificial respiration.

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 with water. Consult a physician.
Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed
Allergic skin reaction.

Hazards: No further relevant information available.

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

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents

This product is non-flammable.

Use extinguishing agent suitable for surrounding fire.

Water spray, foam, dry chemical or carbon dioxide.

For safety reasons unsuitable extinguishing agents: None.

5.2 Special hazards arising from the substance or mixture: Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters

Protective equipment

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information: No further relevant information available.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Avoid formation of dust.

Avoid breathing dust.

Avoid contact with skin and eyes.

Ensure adequate ventilation.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so.

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

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

Good hygienic practices should be observed.

Avoid contact with skin and eyes.

Avoid breathing dust; if exposed to high dust concentration, leave area immediately.

Since empty containers contain product residue, follow all hazard warnings and precautions even after container is emptied.

Ensure good ventilation/exhaust at the workplace.

Normal measures for preventive fire protection.

Remove contaminated clothing and protective equipment before entering eating areas.

Information about fire and explosion protection: No further relevant information available.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: Store in cool, dry place in tightly closed containers.

Information about storage in one common storage facility: Store away from acids. Keep away from sources of ignition.

Further information about storage conditions: Store receptacle in a well-ventilated area.

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: Not required.

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

The usual precautionary measures are to be adhered to when handling chemicals.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not inhale gases/fumes/aerosols.

Avoid contact with the eyes and skin.

Respiratory protection

Wear dust protection mask if there is a risk of dust formation.

Protection of hands



Protective gloves

Minimum breakthrough time / gloves: 480 min.

Minimum thickness / gloves: 0.11 mm.

For the permanent contact gloves made of the following materials are suitable

Nitrile rubber.
Eye protection



Safety glasses

Body protection: Protective work clothing and boots.
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: White.	Change in Condition Melting Point/Melting Range: 130 °C (>266 °F). Boiling Point/Boiling Range: Undetermined.
Odor: Odorless.	Octanol/Water Partition Coefficient: 6.7.
Odor threshold: Not determined.	pH Value: Not applicable.
Vapor pressure: Not applicable.	Flash point: Not available.
Density at 20 °C: 1.17 g/cm ³ .	Flammability (solid, gaseous): Product is not flammable.
Relative density: 1.401 g/cm ³ .	Ignition temperature: Not determined.
Vapor density: Not applicable.	Decomposition temperature: Not determined.
Evaporation rate: Not applicable.	Self-igniting: Not determined.
Solubility in / Miscibility with water: 1.8 mg/m ³	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.

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: No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

No dangerous reactions known.

10.4 Conditions to avoid

Incompatible materials.
Excessive heat.

10.5 Incompatible materials

Strong oxidizing agents.
Acids.

10.6 Hazardous decomposition products
 Carbon monoxide and carbon dioxide
 Nitrogen oxides
 Sulfur oxides (SOx)

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD/LC50 values relevant for classification:		
Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg(rabbit)
Inhalation	LC50	Not available

Additional toxicological information

- Skin corrosion/irritation: Not classified.
- Serious eye damage/irritation: Not classified.
- 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

12.1 Toxicity

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	>2.7 mg/L	96h	Fish	OECD 203	N/A	N/A
EC50	ca.5 µg/L	48h	Daphnia	OECD 202	N/A	N/A
EC50	>0.87 mg/L	96h	Algae	OECD 201	N/A	N/A

12.2 Persistence and degradability: Not available.

12.3 Bio-accumulative potential: Not available.

12.4 Mobility in soil: Not available.

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

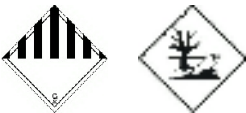
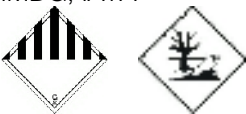
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Un-cleaned packaging

Recommendation: Disposal must be made according to official regulations.

14. TRANSPORTATION INFORMATION	
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14.1 UN-Number	UN 3077
DOT, ADR, IMDG, IATA	UN 3077
14.2 UN proper shipping name:	
DOT	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S (N-(1,1-dimethylethyl)bis(2-benzothiazolesulfen)amide)
ADR	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S (N-(1,1-dimethylethyl)bis(2-benzothiazolesulfen)amide)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., MARINE POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (N-(1,1-dimethylethyl)bis(2-benzothiazolesulfen)amide)),
14.3 Transport hazard class(es)	
DOT, Class	Class: 9 (M7) Miscellaneous dangerous substances and articles. Label: 9
ADR	
	
	Class: 9 (M7) Miscellaneous dangerous substances and articles. Label: 9
IMDG, IATA	
	
	Class: 9 Miscellaneous dangerous substances and articles. Label: 9
14.4 Packing group	
DOT	III
ADR, IMDG, IATA	III
14.5 Environmental hazards	
Marine pollutant	Yes
Special Marking (ADR)	Symbol (fish and tree)
Special Marking (IATA)	Symbol (fish and tree)
14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable.
Transport/Additional information	
ADR: IBC08	

UN "Model Regulation"

UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
SOLID, N.O.S. (N-(1,1-dimethylethyl)bis(2-benzothiazolesulfen)amide) 9, III

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)	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.

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.

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)