



**HARWICK**  
S T A N D A R D

*Safety Data Sheet*  
*ACCELERATOR MBS GR*  
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## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### **PRODUCT IDENTIFIER: ACCELERATOR MBS GR/GRS HH**

#### **Other means of identification**

**Chemical name:** 2-(Morpholinothio)benzothiazole

**Synonyms:** N-oxydiethylene-benzothiazole-2-sulfenamide, MBS

**Recommended use and restrictions on use:** Accelerator

#### **Supplier information:**

##### **Manufactured for and supplied by:**

**Supplier:** Harwick Standard Distribution Corporation

**Supplier Address:** 60 S. Seiberling Street, Akron, OH 44305

**Contact:** Health, Safety & Environment

**Telephone:** 330-798-9300

**Website:** [www.harwickstandard.com](http://www.harwickstandard.com)

## SECTION 2 – HAZARD(S) IDENTIFICATION

#### **Classification of the substance or mixture:**

Skin Irritant, Category 2

Eye Irritant, Category 2A

Skin Sensitization, Category 1

**OSHA Regulatory Status:** Classified as hazardous based on components.

#### **GHS Label Elements**

##### **Hazard symbol:**



**Signal word:** Warning

##### **Hazard statements:**

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

##### **Precautionary Statements:**



Avoid breathing dust/fume/gas/mist/vapors/spray.  
Wash skin thoroughly after handling.  
Contaminated work clothing should not be allowed out of the workplace.  
Avoid release to the environment.  
Wear protective gloves/eye protection/face/protection.  
IF ON SKIN: Wash with plenty of soap and water.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If skin irritation or rash occurs: Get medical advice/attention.  
If eye irritation persists: Get medical advice/attention.  
Take off contaminated clothing and wash before reuse.  
Collect spillage.  
Dispose of contents/container to an approved waste disposal plant.

**Hazard(s) not otherwise classified (HNOC):** None known.

### SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

**Substance/Mixture:**

<u>Components Chemical Identity</u>	<u>CAS Number</u>	<u>Weight%</u>
2-(Morpholiniothio)benzothiazole	102-77-2	96-99%
2-Mercaptobenzothiazole	149-30-4	0-1%
Morpholine	110-91-8	0-0.5%
Mercaptobenzothiazole Disulfide	120-78-5	0-1%
Benzothiazole	95-16-9	0-0.5%

Any concentrations shown as a range is to protect confidentiality or is due to batch variation.  
Occupational exposure limits, if available, are listed in Section 8.

### SECTION 4 – FIRST AID MEASURES

**Inhalation:** Remove affected person to fresh air. If not breathing provide artificial respiration. If breathing is difficult, get immediate medical attention.

**Ingestion:** If swallowed, contact a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

**Skin contact:** Remove contaminated clothing and launder before reuse. Wash skin with soap and water. Get medical attention if irritation persists.

**Eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.



**General Advice:** In case of overexposure or if symptoms develop, seek medical attention. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this Safety Data Sheet to the physician in attendance.

**Most important symptoms/effects, acute and delayed:**

- Eye contact:** Causes eye irritation. Signs/symptoms can include redness, swelling, pain, tearing and hazy vision.
- Inhalation:** May cause mild respiratory irritation. Signs/symptoms can include soreness of nose and throat, coughing and sneezing.
- Skin contact:** Causes moderate skin irritation. Burning sensation may result. Signs/symptoms can include redness, swelling, itching and dryness.
- Ingestion:** Illness may occur after a single swallowing of relatively large quantities of this material.

**Notes to physician:** Provide symptomatic/supportive care as necessary. Treatment based on sound judgment of physician and individual reactions of patient.

**Indication of immediate medical attention and special treatment needed:** Specific treatments in any case must be based on the physician's judgment and in response to the patient's reactions.

## SECTION 5 – FIRE FIGHTING MEASURES

**Suitable extinguishing method:** In case of fire, use water spray, foam, carbon dioxide (CO<sub>2</sub>) or dry powder.

**Unsuitable extinguishing method:** To avoid generating combustible dusts, do NOT use water jet to fight fire.

**Specific hazards arising from chemical:** Fight fire from a safe distance and from a protected location. Combustible dust when in finely divided and highly suspended state. Use water spray to cool fire exposed surfaces. Do not allow runoff to enter waterways.

**Combustion products:** Toxic emissions may result if product is involved in a fire. Fire produces carbon monoxide and carbon dioxide gases.

**Special firefighting equipment and precautions for firefighters:** Avoid breathing smoke or fumes. Firefighters should wear a self-contained breathing apparatus (SCBA) operating in positive pressure mode and full protective clothing for combating fires. To avoid generating combustible dusts, do NOT use water jet to fight fire. Do not allow runoff to enter drains or waterways.



**NFPA Ratings:** Health: 2 Fire: 1 Reactivity: 0

Hazard Scale: 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

### **Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment specified. Avoid the generation of dust. Sweep, vacuum or shovel and place into closable container for disposal.

### **Methods and materials for containment and cleaning up:**

Isolate area and remove sources of friction, impact, heat, low level electrical current and RF energy. Isolate spill and patch the leak package immediately. Remove ignition sources and work with non-sparking tools. DO NOT spread spilled product with water.

### **Environmental precautions:**

Do not allow discharge into the environment-water runoff can cause environmental damage. In the event of a spill or accidental release that cannot be contained, notify the relevant authorities in accordance with all applicable regulations.

## SECTION 7 - HANDLING AND STORAGE

**Precautions for safe handling:** Good hygienic practices should be observed. Work clothes should be washed separately at the end of each work day. Disposable clothing should be discarded with material. Avoid generating or breathing dust. Avoid contact with eyes, skin and clothing. Reclose containers of unused product. Wash hands before eating, chewing gum, using tobacco or using the toilet. Do not reuse container.

**Conditions for safe storage, including any incompatibilities:** Store closed containers in a cool, dry, well-ventilated area. Avoid direct sunlight and static electricity. Keep material away from heat sources. Do not store near Insoluble Sulfur. Store away from strong oxidizing materials.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### **Occupational Exposure Limits:**

#### **Component**

Nuisance Dust

#### **Exposure Limits**

OSHA PEL/8Hr-TWA = 15/mg/m<sup>3</sup> (Total Dust)

OSHA PEL/8Hr-TWA = 5/mg/m<sup>3</sup> (Respirable Dust)

ACGIH TLV/8Hr TWA = 10 mg/m<sup>3</sup>

Morpholine

OSHA PEL/8Hr-TWA = 20 ppm

ACGIH TLV/8Hr TWA = 20 ppm \*skin



**Appropriate engineering controls:** General, local exhaust ventilation as necessary to control any air contaminants to within their exposure limits during use of this product. Adequate ventilation should be provided to keep dust concentration below acceptable exposure limits. Discharge from the ventilation system should comply with applicable air pollution control regulations. Facilities storing or utilizing this material should be equipped with eye wash station(s) and safety shower(s).

**Individual protection measures, such as personal protective equipment:**

**Eye/face protection:** Safety glasses or goggles.

**Skin/Hand protection:** Wear impervious gloves to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with good laboratory practices. Wash hands with soap and water.

**Body protection:** To protect the body, wear impervious clothing such as coveralls to minimize skin contact. Select protective equipment according to the concentration and amount of the dangerous substance at the specific workplace. Launder contaminated clothing before reuse.

**Respiratory protection:** Appropriate respiratory protection shall be worn when applied engineering controls are not adequate to protect against inhalation exposure. If dust is generated, wear NIOSH-approved dust respirator or dust mask. If vapors/dust are generated above exposure limits, use NIOSH approved full-face organic cartridge filter respirator, air supplied respirator or SCBA. Respirators should be selected and used in accordance with OSHA, Subpart 1 (29 CFR 1910.134)

## SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance:</b>	Off-White Powder to Off-White Granules
<b>Odor:</b>	Mild Amine
<b>Decomposition Temperature:</b>	No data available
<b>Odor Threshold:</b>	No data available
<b>pH:</b>	No data available
<b>Boiling Point/Range:</b>	Decomposes >385°C
<b>Melting Point/Freezing Point:</b>	82-88°C
<b>Flash Point (°C):</b>	177°C (350°F)
<b>Flammable/Explosion Limits:</b>	No data available
<b>Relative Density (Specific Gravity):</b>	1.4 @ 25°C
<b>Vapor Pressure:</b>	Negligible
<b>Vapor Density:</b>	No data available
<b>Solubility:</b>	Insoluble in water
<b>Evaporation Rate:</b>	No data available



<b>Partition Coefficient:</b> (n-octanol/water)	No data available
<b>Auto-ignition Temperature:</b>	No data available
<b>Viscosity:</b>	No data available
<b>Explosive Properties:</b>	No data available

## SECTION 10 - STABILITY & REACTIVITY

**Reactivity:** No specific test data available for this product.

**Chemical stability:** Stable when stored at room temperature in closed, original container. Stable under normal conditions of handling, use and transportation. Stable if protected from heat and exposure to air. Hazardous polymerization will not occur.

**Possibility of hazardous reactions:** Under normal conditions of storage and use, hazardous reactions are not anticipated.

**Conditions to avoid:** Keep away from heat, sparks and flame. Avoid generating dust. Avoid excessive heat. Avoid contact reducing agents, acids.

**Incompatible materials:** Strong oxidizing agents. Strong acids. Do not store near Insoluble sulfur. Avoid contamination of product with small amounts of water.

**Hazardous decomposition products:** Carbon monoxide. Oxides of nitrogen. Oxides of sulfur.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Acute Toxicity

**Oral:** LD50 (Rat): >5,000 mg/kg  
**Dermal:** LD50 (Rabbit): >7,940 mg/kg  
**Inhalation:** Not determined

### Irritation/Corrosion:

**Skin:** No data available  
**Eyes:** Eye irritation (Rabbit, 24 hours)  
**Respiratory:** No data available

### Sensitization:

**Skin:** Possible sensitizer. Similar compounds have at least some potential for allergic skin reaction in humans after prolonged and repeated exposure.  
**Respiratory:** No data available

**Mutagenicity:** No data available



**Carcinogenicity:** Negative in standard tests using bacteria and yeast cells.

This product or its components present at 0.1% or more is not listed as a carcinogen or suspected carcinogen by NTP, IARC or OSHA.

Releases amine vapors during vulcanization and can react with nitrosating agents to form the carcinogenic compound N-nitrosomorpholine.

**Reproductive/Developmental toxicity:**

No evidence of teratogenicity in animal studies using rats, mice and/or hamsters. Embryotoxicity reported in studies conducted on chicken embryos. Did not effect reproductive performance or post-natal development in animal studies. Higher doses administered during gestation in rats resulted in a slight increase in fetal mortality and slight decrease in fetal body weights.

**Specific target organ toxicity-single exposure:** No data available

**Specific target organ toxicity-repeated exposure:** No data available

**Information on likely routes of exposure:** Routes of entry: Eyes, Inhalation, Dermal-Skin

**Potential acute health effects:**

**Eye contact:** Causes eye irritation.

**Inhalation:** May cause mild respiratory irritation.

**Skin contact:** Causes moderate skin irritation. Burning sensation may result.

**Ingestion:** Illness may occur after a single swallowing of relatively large quantities of this material.

**Symptoms related to the physical, chemical and toxicological characteristics:**

**Inhalation:** Signs/symptoms can include soreness of nose and throat, coughing and sneezing.

**Skin Contact:** Signs/symptoms can include redness, swelling, itching and dryness.

**Eye Contact:** Signs/symptoms can include redness, swelling, pain, tearing and hazy vision.

**Ingestion:** No specific data. Illness may occur after a single swallowing of relatively large quantities of this material.

**Delayed and immediate effects and also chronic effects from short and long term exposure:**

**Short term exposure:**

**Potential immediate effects:** Not available.

**Potential delayed effects:** Not available.

**Long term exposure:**

**Potential immediate effects:** Not available.



**Potential delayed effects:** Not available.

**Potential chronic health effects:** Pulmonary disorders. Dermal ailments. Eye, skin, respiratory, blood, liver and or/kidney ailments. This material of its emissions may cause an allergic or sensitization reaction and thereby aggravate systemic disease.

## SECTION 12 - ECOLOGICAL INFORMATION

### **Ecotoxicity:** **Component**

**Fish:** LC50 (96 hr): 4.4 mg/L (Bluegill Sunfish)  
LC50 (96 hr): 3.5 mg/L (Fathead Minnow)  
LC50 (48 hr): 5.3 mg/L (Midge)  
LC50 (96 hr): 1.3 mg/L (Rainbow Trout)  
**Crustaceans:** LC50 (48 hr): 4.10 mg/L (Daphnia magna)  
**Algae:** EC50 (96 hr): 2.0 mg/L

**Persistence and degradability:** Ready Biodegradation: 0% after 28 days

**Bioaccumulative potential:** No data available

**Bioconcentration factor:** No data available

**Mobility in soil:** No data available

**Other adverse effects:** Toxic to aquatic life with long lasting effects.

## SECTION 13 - DISPOSAL CONSIDERATIONS

**Disposal instructions:** The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Empty containers should be handled in a manner not to cause dusting during collection, transportation and disposal. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues and must be treated as waste. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14 - TRANSPORTATION INFORMATION





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**U.S. DOT:** Not DOT regulated.

## SECTION 15 - REGULATORY INFORMATION

**U.S.:**

**TSCA Inventory Status:** Chemical components are listed or exempt.

**Title III SARA Status:**

### **SARA Section 302-Extremely Hazardous Substance**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### **SARA Section 311 & 312-Hazardous Categories**

Acute Health Hazard

### **SARA Section 313-Toxic Chemicals**

This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372:

2-Mercaptobenzothiazole.

**California Proposition 65:** This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.

## SECTION 16 - OTHER INFORMATION

**Issue date:** 12-11-2015

**Version #:** 01

**Revision Information:** GHS Format

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