

# SAFETY DATA SHEET

## Azo-Grout™ 551



### Section 1. Identification

**GHS product identifier** : Azo-Grout™ 551  
**Product code** : Not available.  
**Other means of identification** : Not available.  
**Product type** : Liquid.

#### Relevant identified uses of the substance or mixture and uses advised against

Identified uses
Soil Stabilization.

**Supplier's details** :

**Manufacturer** : Azon USA Inc.  
2204 Ravine Road  
Kalamazoo, MI 49004-3516  
U.S.A.  
Tel: 269-385-5942

**Emergency telephone number (with hours of operation)** : CHEMTREC, U.S.: 1-800-424-9300  
International: +1-703-527-3887  
24/7

### Section 2. Hazard(s) identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

#### GHS label elements

**Hazard pictograms** :



**Signal word** : Warning

**Hazard statements** : H319 - Causes serious eye irritation.

## Section 2. Hazard(s) identification

### Precautionary statements

<b>Prevention</b>	: P280 - Wear eye or face protection. P264 - Wash thoroughly after handling.
<b>Response</b>	: P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
<b>Storage</b>	: Not applicable.
<b>Disposal</b>	: Not applicable.
<b>Hazards not otherwise classified (US)</b>	: None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: Mixture
<b>Other means of identification</b>	: Not available.

Ingredient name	% (w/w)	CAS number
2,2' -Oxybisethanol	5 - 10	111-46-6
Ethenediol	1 - 5	107-21-1

United States: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

Canada: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with the amended HPR as of April 2018.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

<b>Eye contact</b>	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.
<b>Inhalation</b>	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
<b>Skin contact</b>	: Flush contaminated skin with plenty of water. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Ingestion</b>	: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## Section 4. First aid measures

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### United States

##### Occupational exposure limits

Ingredient name	Exposure limits
2,2' -Oxybisethanol  Ethanediol	<b>AIHA WEEL (United States, 7/2020).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. <b>ACGIH TLV (United States, 3/2020).</b> STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Inhalable fraction. Aerosol only. STEL: 50 ppm 15 minutes. Form: Vapor fraction TWA: 25 ppm 8 hours. Form: Vapor fraction

#### Canada

##### Occupational exposure limits

Ingredient name	Exposure limits
2,2' -Oxybisethanol  Ethanediol	<b>AIHA WEEL (United States, 7/2020).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. <b>CA British Columbia Provincial (Canada, 1/2020).</b> C: 100 mg/m <sup>3</sup> Form: Aerosol TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Particulate STEL: 20 mg/m <sup>3</sup> 15 minutes. Form: Particulate C: 50 ppm Form: Vapor <b>CA Saskatchewan Provincial (Canada, 7/2013).</b> CEIL: 100 mg/m <sup>3</sup> Form: Aerosol <b>CA Ontario Provincial (Canada, 6/2019).</b> Ceiling Limit: 10 mg/m <sup>3</sup> Form: Inhalable particulate matter. Aerosol only. STEL: 50 ppm 15 minutes. Form: Vapor fraction TWA: 25 ppm 8 hours. Form: Vapor fraction <b>CA Quebec Provincial (Canada, 7/2019).</b> STEV: 50 ppm 15 minutes. Form: Vapor and mist STEV: 127 mg/m <sup>3</sup> 15 minutes. Form: Vapor and mist <b>CA Alberta Provincial (Canada, 6/2018).</b> C: 100 mg/m <sup>3</sup>

### Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

### Individual protection measures

## Section 8. Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

- Physical state** : Liquid. [Clear.]
- Color** : Clear to light yellow.
- Odor** : Slight.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : Not available.
- Boiling point, initial boiling point, and boiling range** : Not available.
- Flash point** : Closed cup: >93.3°C (>199.9°F)
- Evaporation rate** : Not available.
- Flammability** : Not available.
- Lower and upper explosion limit/flammability limit** : Not available.
- Vapor pressure** : Not available.
- Relative vapor density** : Not available.
- Relative density** : 1.04 to 1.05
- Solubility** : Not available.
- Solubility in water** : Not available.

## Section 9. Physical and chemical properties and safety characteristics

<b>Miscible with water</b>	: Not available.
<b>Partition coefficient: n-octanol/water</b>	: Not applicable.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Not available.
<b>Flow time (ISO 2431)</b>	: Not available.
<b>Particle characteristics</b>	
<b>Median particle size</b>	: Not applicable.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: No specific data.
<b>Incompatible materials</b>	: Reactive or incompatible with the following materials: oxidizing materials.
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2,2' -Oxybisethanol	LD50 Dermal	Rabbit	11890 mg/kg	-
	LD50 Oral	Rat	12000 mg/kg	-
Ethanediol	LD50 Oral	Rat	4700 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2,2' -Oxybisethanol	Eyes - Mild irritant	Rabbit	-	50 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
Ethanediol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Rabbit	-	1 hours 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	6 hours 1440 mg	-
	Skin - Mild irritant	Rabbit	-	555 mg	-

#### Sensitization

There is no data available.

#### Mutagenicity

## Section 11. Toxicological information

There is no data available.

### Carcinogenicity

There is no data available.

### Classification Canada

Product/ingredient name	IARC	NTP	ACGIH
Ethanediol	-	-	A4

### Reproductive toxicity

There is no data available.

### Teratogenicity

There is no data available.

### Specific target organ toxicity (single exposure)

There is no data available.

### Specific target organ toxicity (repeated exposure)

There is no data available.

### Aspiration hazard

There is no data available.

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
 pain or irritation  
 watering  
 redness  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : No known significant effects or critical hazards.  
**Potential delayed effects** : No known significant effects or critical hazards.

#### Long term exposure

**Potential immediate effects** : No known significant effects or critical hazards.  
**Potential delayed effects** : No known significant effects or critical hazards.



## Section 11. Toxicological information

### Potential chronic health effects

- General** : No known significant effects or critical hazards.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Reproductive toxicity** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
2,2' -Oxybisethanol Ethenediol	3689.8 500 500	N/A 11890 N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
2,2' -Oxybisethanol Ethenediol	Acute LC50 75200000 µg/L Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 69000000 µg/L Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 41000 mg/L Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 8050000 µg/L Fresh water	Fish - Pimephales promelas	96 hours

### Persistence and degradability

There is no data available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
2,2' -Oxybisethanol Ethenediol	-1.98	100	low
	-1.36	-	low

### Mobility in soil

- Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

- Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

**AERG** : Not applicable

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 4(a) final test rules:** Octamethylcyclotetrasiloxane  
**TSCA 5(a)2 final significant new use rules:** 2-Methoxyethanol  
**TSCA 8(a) PAIR:** Octamethylcyclotetrasiloxane; Acetaldehyde; Decamethylcyclopentasiloxane  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**Clean Water Act (CWA) 311:** Acetaldehyde; Formaldehyde

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

## Section 15. Regulatory information

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
Formaldehyde	≤0.00001	Yes.	500	73.9	100	14.8

**SARA 304 RQ** : 30030030030 lbs / 13633633633.6 kg [3446531074.8 gal / 13046539362.3 L]

### SARA 311/312

**Classification** : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

#### Composition/information on ingredients

Name	%	Classification
2,2' -Oxybisethanol	≥5 - ≤10	ACUTE TOXICITY (oral) - Category 4 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B
Ethanediol	≥3 - ≤5	ACUTE TOXICITY (oral) - Category 4 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

### SARA 313

	Product name	CAS number	%
<b>Form R - Reporting requirements</b>	Ethanediol	107-21-1	≥3 - ≤5
<b>Supplier notification</b>	Ethanediol	107-21-1	≥3 - ≤5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

**Massachusetts** : The following components are listed: Ethanediol

**New York** : The following components are listed: Ethanediol

**New Jersey** : The following components are listed: Ethanediol

**Pennsylvania** : The following components are listed: 2,2' -Oxybisethanol; Ethanediol

### California Prop. 65

**⚠ WARNING:** This product can expose you to chemicals including 1,4-Dioxane, Acetaldehyde and Formaldehyde, which are known to the State of California to cause cancer, and Ethanediol and 2-Methoxyethanol, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## Section 15. Regulatory information

Ingredient name	No significant risk level	Maximum acceptable dosage level
Ethanediol	-	Yes.
1,4-Dioxane	Yes.	-
2-Methoxyethanol	-	Yes.
Acetaldehyde	Yes.	-
Formaldehyde	Yes.	-

### Canadian lists

**Canadian NPRI** : The following components are listed: Ethylene glycol

**CEPA Toxic substances** : None of the components are listed.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

**Canada** : All components are listed or exempted.

**United States (TSCA 8b)** : All components are active or exempted.

## Section 16. Other information

### Procedure used to derive the classification

Classification	Justification
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method

### History

**Date of issue/Date of revision** : 10/15/2021

**Date of previous issue** : Not applicable

**Version** : 1

**Internal code** : 119-037

**Prepared by** : KMK Regulatory Services Inc.

## Section 16. Other information

### Key to abbreviations

- : ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available
- SGG = Segregation Group
- UN = United Nations

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.