

**SAFETY DATA SHEET**

Following Regulation 1910.1200

SDS Number: 161      Date of first issue: 23 September 2019      Date of last revision: 21 February 2022

**1 - Identification of product**

**a - Product identifier used on the label**

Tradenames: GC1 Coating

**b - Other means of identification**

**Product description** : Flame Retardant.  
**Other means of identification** : Not available.  
**Product type** : liquid

**c - Recommended use of the chemical and restrictions on use**

Identified Uses

Flame Retardant

**d - Name, address, and telephone number**

**Morgan Advanced Materials**  
P. O. Box 923; Dept. 300  
Augusta, GA 30903-0923  
Telephone: 706-796-4200

**e - Emergency Phone Number**

For Product Stewardship and Emergency Information:  
Hotline - 1-800-722-5681  
Fax - 706-560-4054

For additional SDSs and to confirm this is the most current SDS for the product, visit our web page [www.morganthermalceramics.com](http://www.morganthermalceramics.com) or send a request to [MT.NorthAmerica@morganplc.com](mailto:MT.NorthAmerica@morganplc.com)

**2 - Hazard Identification**

**a - Classification of the chemical in accordance with paragraph (d) of §1910.1200**

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
Class D-2A: Material causing other toxic effects (Very toxic).  
**WHMIS (Canada)** :  
Class D-2B: Material causing other toxic effects (Toxic).  
**Classification of the substance or mixture** : EYE IRRITATION- Category 2A

**b - Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200**

Hazard Pictograms



**Signal Word: Warning**

**Hazard Statements**

Causes serious eye irritation

**Precaution Statements**

Wear eye or face protection. Wash hands thoroughly after handling.

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 attention.

**Emergency Overview**

**c - Describe any hazards not otherwise classified that have been identified during the classification process**

**d - Mixture Rule**

Not applicable.

### 3 - Composition / Information On Ingredients

#### a - Composition table

Ingredient name	%	CAS number
Poly(oxy-1,2-ethanediyl), .alpha.-isodecyl-.omega.-hydroxy-	>0- <3	61827-42-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

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

#### b - Common Name

#### d - Impurities and Stabilizing Additives

### 4 - First-Aid measures

#### a - Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion

##### Eyes

Immediately flush eyes thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician immediately.

##### Skin

Wash skin with cool water and pH-neutral soap or a mild detergent intended for use on skin. Seek medical treatment in all cases of prolonged exposure to wet cement, cement mixtures, liquids from fresh cement products, or prolonged wet skin exposure to the dry cement.

##### Respiratory Tract

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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours

##### Gastrointestinal

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.

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

Notes to physician	:	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
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.

### 5 - Fire-fighting measures

#### a - Suitable (and unsuitable) extinguishing media and

Use extinguishing media suitable for type of surrounding fire

#### c - Special Protective Equipment and Precautions for Firefighters

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

#### b - Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

### 6 - Accidental Release Measures

#### a - 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).

#### b - 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.

## 7 - Handling and storage

### a - Precautions for safe handling

<b>Protective measures</b>	:	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.
<b>Advice on general occupational hygiene</b>	:	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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### b - 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. Keep from freezing. Stir before use

### c - empty containers

## 8 - Risk Management Measures / Exposures Controls / Personal Protection

a - OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available

Ingredient name	Exposure limits
Poly(oxy-1,2-ethanediyl), .alpha.-isodecyl-.omega.-hydroxy-	None.

### b - Appropriate Engineering Controls

Use engineering controls, such as ventilation and dust collection devices, to reduce airborne particulate concentrations to the lowest attainable level.

### c - Individual protection measures, such as personal protective equipment

<b>Hygiene measures</b>	:	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.
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<b>PPE - Skin</b>	:	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.
<b>Hand protection</b>	:	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.
<b>Body protection</b>	:	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.
<b>Other skin protection</b>	:	

### PPE - Eye

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.

### PPE – Respiratory

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## 9 - Physical and chemical properties

<b>a - Appearance</b>	Grey liquid
<b>b - Odor</b>	Characteristic
<b>c - Odor Threshold</b>	Not applicable
<b>e- pH</b>	8.5 - 9.5
<b>d - Melting Point</b>	Not applicable
<b>f- Initial Boiling Point/Range</b>	Not applicable
<b>g- Flashpoint</b>	Closed cup >93.3°C
<b>h - Evaporation Rate</b>	Not applicable
<b>i - Flammability</b>	Not applicable
<b>j - Upper/Lower Flammability or Explosive Limits</b>	Not applicable
<b>k - VAPOR PRESSURE</b>	Not applicable
<b>l - VAPOR DENSITY</b>	Not applicable
<b>m - Solubility</b>	Not soluble in water
<b>n - Relative Density</b>	1.25-1.35
<b>o - Partition Coefficient: n-Octanol/water</b>	Not applicable
<b>p - Auto-ignition temperature</b>	Not applicable
<b>q - Decomposition Temperature</b>	Not available
<b>r - Viscosity</b>	<b>Dynamic:</b> 2,500 - 3,200 mPa.s

## 10 - Stability and Reactivity

### a - Reactivity

Stable under conditions of normal use.

### b - Chemical Stability

This is a stable material.

### c - Possibility of Hazardous Reaction

### d - Conditions to Avoid

Please refer to handling and storage advise in Section 7.

### e - Incompatible Materials

None

### f - Hazardous decomposition products

No known hazardous decomposition

## 11 - Toxicological information

### a - TOXICOKINETICS, METABOLISM AND DISTRIBUTION

### b - Acute Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Conclusion/Summary	:	Not available.		

### c - Epidemiology

### d - Toxicology

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Poly(oxy-1,2-ethanediy), .alpha.-isodecyl-.omega.-hydroxy-	Eyes- Severe irritant	Rabbit	-	24 hrs	-

### Conclusion/Summary

Skin : Not available.  
Eyes : Not available.  
Respiratory : Not available.

### Sensitization

### Conclusion/Summary

Skin : Not available.  
Respiratory : Not available.

### Mutagenicity

### Conclusion/Summary

: Not available.

### Carcinogenicity

### Conclusion/Summary

: Not available.

### Reproductive toxicity

### Conclusion/Summary

: Not available.

### Teratogenicity

### Conclusion/Summary

: Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

### Information on likely routes of exposure

: Not available.

### Potential acute health effects

Eye contact : Causes serious eye irritation.  
Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.  
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

Adverse symptoms may include the following:

Eye contact : pain or irritation  
watering  
redness  
Inhalation : No specific data.  
Skin contact : No specific data.  
Ingestion : No specific data.

### Delayed and immediate effects as well as 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

Conclusion/Summary : Not available.  
General : No known significant effects or critical hazards.  
Carcinogenicity : No known significant effects or critical hazards.  
Mutagenicity : No known significant effects or critical hazards.  
Teratogenicity : No known significant effects or critical hazards.  
Developmental effects : No known significant effects or critical hazards.  
Fertility effects : No known significant effects or critical hazards.

### Numerical measures of toxicity

### Acute toxicity estimates

Route	ATE value
Oral	26,315.8 mg/kg

International Agency for Research on Cancer and National Toxicology Program

## 12 - Ecological information

No data available.

### c - Bioaccumulative potential

No information for the product.

### d - Mobility in soil

No information for the product.

### e - Other adverse effects (such as hazardous to the ozone layer)

No information available for the product.

## 13 - Disposal Considerations

### Waste Management and Disposal

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. 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 emptied 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

### Additional information

## 14 - Transport information

### a - UN number.

Hazard Class: Not Regulated United Nations (UN) Number: Not Applicable  
Labels: Not Applicable North America (NA) Number: Not Applicable  
Placards: Not Applicable Bill of Lading: Product Name

### b - UN proper shipping name

Not applicable.

### c - Transport hazard class(es)

Not applicable.

### d - Packing group, if applicable

Not applicable.

### e - Environmental hazards (e.g., Marine pollutant (Yes/No))

No.

### f - Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

Not regulated.

### g - Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises

Not applicable.

### International

**15 - Regulatory information**

**15.1 - United States Regulations**

**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined

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

**U.S. Federal regulations**

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

No products were found.

**SARA 304 RQ** : Not applicable.

**SARA 311/312**

**Classification** : Immediate (acute) health hazard

**Composition/information on ingredients**

Name	%	Classification
Poly(oxy-1,2-ethanediyl), .alpha.-isodecyl-.omega.-hydroxy-	>0- <3	AH

**State regulations**

- Massachusetts** : None of the components are listed.
- New York** : None of the components are listed.
- New Jersey** : The following components are listed:  
1,2-Propanediol  
Carbon black
- Pennsylvania** : The following components are listed:  
Aluminum hydroxide  
1,2-Propanediol  
Carbon black

**California Prop. 65**

WARNING: This product contains a chemical known to the State of California to cause cancer., WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Carbon black	Yes.	No.	No.	No.
Methanol	No.	Yes.	No.	23000 µg/day
	No.	Yes.	No.	47000 µg/day

**15.2 - International Regulations**

**International lists**

**National inventory.**

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

**16 - Other Information**

## initial statement

Classification	Justification
H319	Calculation method

**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)  
 UN = United Nations

**Devitrification****Product Stewardship Program****HMIS HAZARD RATING****TECHNICAL DATA SHEETS****Revision Summary**

Revision date updated.

**MSDS prepared by**

SDS Prepared By: MORGAN THERMAL CERAMICS ENVIRONMENTAL, HEALTH &amp; SAFETY DEPARTMENT

**Disclaimer**

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