## SECTION 1: IDENTIFICATION

**1.1 PRODUCT IDENTIFIER**

**Product Name:** GacoFireStop2 - POLYOL COMPONENT B

**Product Code:** F5001, F5001-55, F5001-480

**1.2 RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE**

**Product Use:** Spray Foam Insulation

Use this product in accordance with all local, regional, national and international regulations.

**1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET**

**Name/Address:** Gaco Western LLC
1245 Chapman Dr.
Waukesha, WI, 53186-5942
USA

**Telephone Number:** 800-331-0196 / **International**: 001-800-331-0196

**Email:** sds@gaco.com

**Website:** www.gaco.com

**1.4 EMERGENCY TELEPHONE NUMBER**

For Chemical Emergency
Spill, Leak, Fire, Exposure, or Incident
Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1-703-527-3887 (collect calls accepted)

## SECTION 2: HAZARD(S) IDENTIFICATION

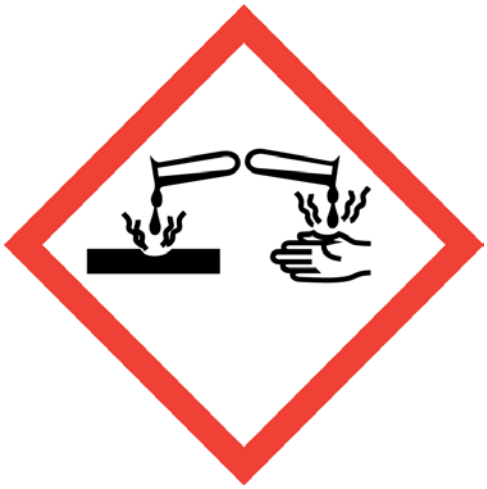
**2.1 CLASSIFICATION OF THE CHEMICAL**

**Hazard class:**

| HAZARD CLASSIFICATION | CATEGORY |
|---|---|
| Skin Corrosion/Irritation | 2 |
| Eye Damage/Irritation | 1 |

**2.2 LABEL ELEMENTS**

**Hazard Pictogram:** **GHS05**



**Signal Word:** Danger

**Hazard Statement:** Causes skin irritation
Causes serious eye damage

**Prevention:** Wash thoroughly after handling.
Wear protective eye protection/face protection.

**Response:** If on skin: Wash with plenty of water.
Specific treatment (see Section 8 on this label).
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
Immediately call a poison center/doctor.

**Storage:** Store in a well-ventilated place. Keep container tightly closed.

**Disposal:** Dispose of contents and container in accordance with all local, regional, national and international regulations.

### 2.3 ADDITIONAL INFORMATION

**Main Symptoms:** Causes severe eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Causes skin irritation. May cause redness and pain.

**Hazards not otherwise specified:** None Known

18.5 % of the mixture consists of ingredient(s) of unknown acute toxicity

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 MIXTURES

| Material | CAS No. | Weight %* |
|---|---|---|
| beta-D-fructofuranosyl alpha-D-glucopyranoside | 57-50-1 | 10-30% |
| Glycerol, propylene oxide, ethylene oxide polymer | 9082-00-2 | 7-13% |
| Tertiary Amines (no cas) | None | 5-10% |
| 2-[(2-[2-(dimethylamino)ethoxy]ethyl)methylamino]ethanol | 83016-70-0 | 1-5% |
| Dimethylaminoethoxyethanol | 1704-62-7 | 0.1-1% |
| N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine) | 3033-62-3 | 0.1-1% |

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

## SECTION 4: FIRST-AID MEASURES

### 4.1 DESCRIPTION OF THE FIRST AID MEASURES

**General Information:** Ensure that medical personnel are aware of the materials(s) involved, and take precautions to protect themselves.

**Inhalation:** Move to fresh air. Call a physician if symptoms occur.

**Skin:** Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.

**Eye:** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

**Ingestion:** Rinse mouth. Get medical attention if symptoms occur.

### 4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Causes severe eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Causes skin irritation. May cause redness and pain.

### 4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENTS NEEDED

**Note to Physicians:** Treat symptomatically.

**Specific Treatments:** In case of accident or if you feel unwell, seek medical advice (show the label or SDS where possible).

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1 EXTINGUISHING MEDIA

**General Hazards:** No unusual fire or explosion hazard.

**Suitable Extinguishing Media:** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2)

**Unsuitable Extinguishing Media:** Do not use water jet as an extinguisher as this will spread the fire.

### 5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

**Specific hazards:** During fire, gases hazardous to health may be formed.

**Products of Combustion:** May include, and are not limited to: oxides of carbon.

### 5.3 Special protective equipment and precautions for fire-fighters (PPE)

**Special protective equipment for fire-fighters:**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Special fire-fighting procedures:** Keep upwind of fire. Move containers from fire area if you can do it without risk.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Local authorities should be advised if significant spillages cannot be contained.

### 6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING - UP

**Methods for Containment:** Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

**Methods for Cleaning-Up:** Stop the flow of material, if this is without risk. Dike far ahead of spill for later disposal. Following product recovery, flush area with water. For

waste disposal, see Section 13 of the SDS.

**Large Spills:** Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

**Small Spills:** Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Never return spills to original containers for re-use.

**Environmental Precautions:** Avoid discharge into drains, water courses or onto the ground.

## SECTION 7: HANDLING AND STORAGE

### 7.1 PRECAUTIONS FOR SAFE HANDLING

**Safe handling advice:** Observe good industrial hygiene practices.

**General hygiene advice:** Ensure that medical personnel are aware of the materials(s) involved, and take precautions to protect themselves.

### 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

**Storage:** Store away from incompatible materials.

**Specific use:** Spray Foam Insulation

**Technical measures:** No specific recommendations.

**Incompatible materials:** None known

**Safe storage:** Store away from incompatible materials.

**Safe packaging material:** No specific recommendations.

**Precautions:** Use personal protective recommended in Section 8 of the SDS.

**Safe handling advice:** Observe good industrial hygiene practices.

**Suitable storage conditions:** Store away from incompatible materials.

**Handling-technical measures:** No specific recommendations.

**Local and general ventilation:** Provide adequate ventilation.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 CONTROL PARAMETERS

**Control parameters:** Follow standard monitoring procedures.

**Exposure limits:**

**beta-D-fructofuranosyl alpha-D-glucopyranoside**

OSHA:
PEL-TWA mg/m3: 5
Notes: RESPIRABLE FRACTION, 15 mg/m3 TOTAL DUST
NIOSH:
REL-TWA mg/m3: 5
Notes: RESPIRABLE FRACTION, 10 mg/m3 TOTAL DUST

### 8.2 EXPOSURE CONTROLS

**Engineering measures to reduce exposure:**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels to an acceptable level.

### 8.3 INDIVIDUAL PROTECTIVE MEASURES

| | |
|---|---|
| **General:** | Use personal protective equipment as required. |
| **Eye protection:** | Wear safety glasses with side shields (or goggles) and a face shield. |
| **Hand protection:** | Wear appropriate chemical resistant gloves. |
| **Respiratory protection:** | In case of insufficient ventilation, wear suitable respiratory equipment. |
| **Skin and body protection:** | Wear suitable protective clothing. |
| **Hygiene measures:** | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |
| **Control parameters:** | Follow standard monitoring procedures. |
| **Thermal hazards:** | Wear appropriate thermal protective clothing, when necessary. |

**Environmental exposure controls:** Environmental manager must be informed of all major releases.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance:** | Viscous Orange Liquid |
| **Color:** | Orange |
| **Form:** | Liquid |
| **Odor:** | mild amine-like |
| **Odor Threshold:** | Not available |
| **Physical State:** | Liquid |
| **pH (at 20°C):** | 10.7 |
| **Melting Point/Freezing Point:** | Not available |
| **Initial Boiling Point and Boiling Range:** | Not available |
| **Flash Point:** | Not available |
| **Evaporation Rate:** | Not available |
| **Flammability (solid, gaseous):** | Not Flammable |
| **Lower Flammability/Explosive Limit:** | Not available |
| **Upper Flammability/Explosive Limit:** | Not available |
| **Evaporation rate:** | Not available |
| **Vapor Pressure (mm Hg @38°C):** | Not available |
| **Vapor Density:** | Not available |
| **Density (lb/gal):** | 9.99 |
| **Relative Density/Specific Gravity:** | 1.2 |
| **Solubility in water/miscibility:** | Soluble |
| **Partition coefficient: n-octanol/water:** | Not available |
| **Auto-ignition Temperature:** | Not available |
| **Decomposition Temperature:** | Not available |
| **Viscosity (at 20°C) g/L:** | 4500 |
| **Oxidizing Properties:** | Not available |
| **Explosive Properties:** | Not available |
| **VOC:** | <15 g/L (<0.125 lb/gal) |
| **Solvent content - Organic:** | Not available |
| **Solvent content - Water:** | Not available |
| **Solvent content - Solids:** | Not available |
| **Other information:** | Not available |
| **Incompatibilities:** | acids, oxidizing agents |

## SECTION 10: STABILITY AND REACTIVITY

**10.1 REACTIVITY:** The product is stable and non-reactive under normal conditions of use, storage and transport.

**10.2 CHEMICAL STABILITY**

**Chemical stability:** Material is stable under normal conditions.

**Materials to avoid:** The product is stable and non-reactive under normal conditions of use, storage and transport.

**10.3 POSSIBILITY OF HAZARDOUS REACTIONS**

**Hazardous Reactions:** No dangerous reaction known under conditions of normal use.

**10.4 CONDITIONS TO AVOID:** Contact with incompatible materials.

**10.5 INCOMPATIBLE MATERIALS**: Strong oxidizing agents.

**10.6 HAZARDOUS DECOMPOSITION PRODUCTS**

**Hazardous decomposition products:** No hazardous decomposition products are known.

**Hazardous Polymerization:** Does not occur.

**Other Information:** Not available.

## SECTION 11: TOXICOLOGICAL INFORMATION

**11.1 INFORMATION ON TOXICOLOGICAL EFFECTS**

**Acute Toxicity:** Causes severe eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Causes skin irritation. May cause redness and pain.

**Likely Routes of Exposure:** Skin contact. Eye contact. Inhalation.

**Eye:** Causes severe eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

**Skin:** Causes skin irritation. May cause redness and pain.

**Ingestion:** Not an expected route of exposure. Expected to be a low ingestion hazard.

**Inhalation:** Not an expected route of exposure. No adverse effects due to inhalation are expected.

**LD50/LC50 values relevant to this classification:**

**beta-D-fructofuranosyl alpha-D-glucopyranoside**

Oral rat LD50 27,700 mg/kg bw

**Tertiary Amines**

Oral rat LD50 1290 mg/kg bw
Inhalation rat LC50 >2.63 mg/l 1 hr
Dermal rabbit LD50 500-1000 mg/kg bw

**2-[(2-[2-(dimethylamino)ethoxy]ethyl)methylamino]ethanol**

Oral rat LD50 1364 mg/kg bw
Derm rabbit LD50 5700 mg/kg bw

**Calculated overall chemical acute toxicity values for this formulation:**

| Calculated overall Chemical Acute Toxicity Values | | |
|---|---|---|
| **LC50 (inhalation)** | **LD50 (oral)** | **LD50 (dermal)** |
| >5 mg/kg (dust and mist) | >2000 mg/kg | >2000 mg/kg |

### 11.2 DELAYED, IMMEDIATE, AND CHRONIC EFFECTS OF SHORT- AND LONG-TERM EXPOSURE

**Skin Corrosion/Irritation:** Causes skin irritation. May cause redness and pain.

**Serious Eye Damage/Irritation:** Causes severe eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

**Respiratory Sensitization:** Based on available data, this product is not expected to cause respiratory sensitization.

**Skin Sensitization:** Based on available data, this product is not expected to cause skin sensitization.

**Symptoms and Target Organs:** Causes severe eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Causes skin irritation. May cause redness and pain.

**Chronic Health Effects:** No chronic health effects known.

**Carcinogenicity:** This product is not classified as a carcinogen.

**Mutagenicity:** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Reproductive Toxicity:** This product is not expected to cause reproductive or developmental effects.

**Specific Target Organ Toxicity (STOT):**

**Single Exposure:** Not classified as an STOT - Single Exposure.

**Repeated Exposure:** Not classified as an STOT - Repeated Exposure.

**Aspiration Toxicity:** Based on available data, this product is not expected to cause aspiration toxicity.

**Other Information:** Not available.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 ECOTOXICITY

**Acute/Chronic Toxicity:** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Aquatic toxicity:** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Environmental effects:** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

### 12.2 PERSISTENCE AND DEGRADABILITY

**Persistence/biodegradability:** The product contains substances which are not expected to be readily biodegradable.

**Result of PBT and vPvB assessment:**

### 12.3 BIOACCUMULATIVE POTENTIAL

**Bioaccumulation:** No data available.

**12.4 MOBILITY**

**Mobility:** No data available.
**Mobility in soil:** No data available.
**Mobility in non-soil:** No data available.

**12.5 OTHER ADVERSE EFFECTS**

**Ozone layer:** No data available.

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1 WASTE TREATMENT METHODS**

**Disposal Method:** This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

**Contaminated packaging:** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Dispose of contents and container in accordance with all local, regional, national and international regulations.

**EU Codes:** The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Residual Waste:** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Disposal instructions:** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Waste Codes:** The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Other disposal recommendations:** None

## SECTION 14: TRANSPORT INFORMATION

**DOT Non-Bulk**

Not classified as Dangerous Goods for Transport

**DOT Bulk**

Not classified as Dangerous Goods for Transport

**IMDG**

Not classified as Dangerous Goods for Transport

**ICAO/IATA**

Not classified as Dangerous Goods for Transport

**Reportable quantity:** Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material

## SECTION 15: REGULATORY INFORMATION

## 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/ LEGISLATIONS SPECIFIC FOR THE CHEMICAL

**US Federal Regulations:**

**U.S. OSHA (Occupational Safety and Health Administration) Specifically Regulated Substances (29 CFR 1910.1001-1050)**

No components of this product are present at concentration greater than or equal to 0.1% and are identified as a carcinogen or potential carcinogen by OSHA.

**SARA/CERCLA reporting requirements:**

No components of this product are found at concentrations greater than or equal to 0.1% and are subject to the SARA/CERCLA reporting requirements.

**State Right-to-Know Regulations**

The following components of this product are found at concentrations greater than or equal to 0.1%, subject to state Right-to-Know reporting requirements; or are found at any concentration and are listed under California Proposition 65.

| Material | California Proposition 65 | Massachusetts Right-to-Know | Minnesota Employee Right-to-Know | New Jersey Community Environmental Hazard Right-to-Know | New Jersey Right-to-Know Substance | Pennsylvania Right-to-Know | Rhode Island Right-to-Know |
|---|---|---|---|---|---|---|---|
| Tertiary amine | Not listed | Listed | Not listed | Not listed | Not listed | Not listed | Not listed |
| N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine) | Not listed | Not listed | Not listed | Not listed | Listed | Not listed | Not listed |
| Ethylene Glycol (trace) | Dev | Listed | Listed | Not listed | Listed | Listed | Listed |

**California:**

**Proposition 65:**

WARNING: This product can expose you to Ethylene Glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

**Global Inventories:**

| Notification status: | |
|---|---|
| US - TSCA | All substances are listed |
| Canada -DSL | All substances are listed |
| Canada - NDSL | All substances are listed |
| EU - EINECS | Not all substances are listed |
| EU - ELINCS | At least 1 substances is listed |
| EU - NLP | No substances are listed |
| Australia – AICS | All substances are listed |
| China - EICSC | All substances are listed |
| Japan - ENCS | All substances are listed |
| Korea - KECI | All substances are listed |
| Taiwan - NECI | All substances are listed |
| New Zealand - NZIoC | All substances are listed |
| Philippine - PICCS | All substances are listed |

**EU - REACH Status:**

A registration number is not available for substances in this mixture as the substances are exempted from registration, the annual tonnage does not require a registration or the registration is envisioned for a later registration deadline.

**CANADA – WHMIS (Workplace Hazardous Materials Information System) Classification:**

D1B, D2B, E

**MEXICO:**

**Hazard Classification:** 3-1-0
**Carcinogen Status:** No data available.

## SECTION 16: OTHER INFORMATION

**HMIS (Hazardous Materials Identification System) Rating:**

| | |
|---|---|
| **Health:** | **3** |
| **Flammability:** | **1** |
| **Physical:** | **0** |

**NFPA 704 (National Fire Protection Association) Rating:**

| | |
|---|---|
| **Health** | **3** |
| **Fire** | **1** |
| **Reactivity** | **0** |

**Legend:**

| | |
|---|---|
| DOT | US Department of Transportation |
| IATA | International Air Transport Association |
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods |
| ACGIH | American Conference of Governmental Industrial Hygienists |
| NTP | National Toxicology Program |
| IARC | International Agency for Research on Cancer |
| PPE | Personal Protective Equipment |
| RCRA | Resource Conservation and Recovery Act |
| CAA | Clean Air Act |
| SARA | Superfund Amendments and Reauthorization Act |
| EPCRA | Emergency Planning and Community Right-to-Know Act |
| WHMIS | Workplace Hazardous Materials Information System |
| EU | European Union |
| REACH | Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act |
| TSCA | US Toxic Substances Control Act (TSCA) |
| DSL | Canada Domestic Substance List (DSL) |
| NDSL | Canada Non-Domestic Substance List (NDSL) |
| EINECS | European Inventory of Existing Commercial Chemical Substances (EINECS) |
| ELINCS | European List of Notified Chemical Substances (ELINCS) |
| NLP | European list of No-longer Polymers (NLP) |
| AICS | Australian Inventory of Chemical Substances (AICS) |
| EICSC | China Existing Chemical Inventory - IECSC |
| ENCS | Japanese Existing and New Chemical Substances Inventory(ENCS) |
| KECI | Korea Existing Chemicals Inventory(KECI) |
| NECI | Taiwan National Existing Chemical Inventory (NECI) |
| NZIoC | New Zealand Inventory of Chemicals (NZIoC) |
| PICCS | Philippine Inventory of Chemicals and Chemical Substances (PICCS) |

| | |
|---|---|
| HMIS | Hazardous Materials Identification System |
| NFPA | National Fire Protection Association (NFPA) |

| | |
|---|---|
| **Date of Preparation:** | September 20, 2017 |
| **Version:** | 1.0 |
| **Revision Date:** | September 20, 2017 |
| **Disclaimer:** | We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use. |
| **Prepared by:** | Gaco Western LLC |

**End of Safety Data Sheet**