

SAFETY DATA SHEET

SECTION 1) IDENTIFICATION

Product ID: Wet-Cold Weather Bonding Adhesive Part A
Product Name: High strength, Low temperature adhesive
Revision Date: Jan 12, 2023 **Date Printed:** Feb 15, 2023
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: BLUESTONE PRODUCTS, a TCC Materials Company
Address: 2025 CENTRE POINTE BLVD, MENDOTA HEIGHTS, MN, US, 55120
Emergency Phone: 800-424-9300
Information Phone Number: 651-688-9116
Fax:
Product/Recommended Uses:

SECTION 2) HAZARDS IDENTIFICATION

Classification

Eye Irritation - Category 2A

Skin Sensitizer - Category 1

Safety data sheet prepared in accordance to the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

Pictograms



Signal Word

Warning

Hazardous Statements - Health

H319 - Causes serious eye irritation

H317 - May cause an allergic skin reaction

Precautionary Statements - General

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

Precautionary Statements - Prevention

P264 - Wash thoroughly after handling.

P280 - Wear protective gloves, protective clothing, eye protection/face protection.

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P272 - Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements - Response

P305 - IF IN EYES:

P351 - Rinse cautiously with water for several minutes.

P338 - Remove contact lenses, if present and easy to do. Continue rinsing.

P337 - If eye irritation persists:

P313 - Get medical advice/attention.

P302 - IF ON SKIN:

P352 - Wash with plenty of water.

P333 + P313 - If skin irritation or a rash occurs: Get medical advice/attention.

P321 - Specific treatment (see First-Aid on this label).

P362 + P364 - Take off contaminated clothing. And wash it before reuse.

Precautionary Statements - Storage

No precautionary statement available.

Precautionary Statements - Disposal

P501 - Dispose of contents/container in accordance with local/national/international regulations.

Hazards Not Otherwise Classified (HNOC)

None.

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	GHS Classifications	% By Weight
0014808-60-7	SILICA, CRYSTALLINE	Carc. 1A, H350; STOT RE 1, H372	60.00% - 80.00%
0025013-15-4	VINYL TOLUENE	Acute Tox. Derm. 5, H313; Acute Tox. Inh. 4, H332; Acute Tox. Oral 5, H303; Aquatic Acute 2, H401; Aquatic Chronic 2, H411; Asp. Tox. 1, H304; Eye Irr. 2A, H319; Flam. Liq. 3, H226; Muta. 2, H341; Repr. 2, H361; Skin Irr. 2, H315; STOT SE 3 (Resp.), H335	5.00% - 12.00%
0000109-16-0	POLYGLYCOLDIMETHACRYLATE	Skin Sens. 1B, H317	0.00% - 5.00%
0027813-02-1	HYDROXYALKYL METHACRYLATE	Skin Sens. 1, H317	0.00% - 5.00%
0007631-86-9	SILICA, AMORPHOUS	Acute Tox. Oral 5, H303; Eye Irr. 2A, H319; STOT SE 3 (Resp.), H335	0.00% - 5.00%
0013463-67-7	TITANIUM DIOXIDE	Eye Irr. 2A, H319; Skin Irr. 3, H316	0.00% - 1.00%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor if you feel unwell.

Eye Contact

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open.

Remove contact lenses, if present and easy to do.

Continue rinsing for a duration of 15-20 minutes.

Take care not to rinse contaminated water into the unaffected eye or onto the face.

If eye irritation persists:

Get medical advice/attention.

Avoid direct contact. Wear chemical protective gloves, if necessary.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts).

Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes.

If skin irritation or a rash occurs:
Get medical advice/attention.
Wash contaminated clothing before re-use or discard.

Ingestion

Rinse mouth.
If you feel unwell/If concerned:
Call a POISON CENTER/doctor.

Most important symptoms and effects, both acute and delayed

No data available.

Indication of any immediate medical attention and special treatment needed

No specific treatment is required. 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. Treat according to symptoms (decontamination, vital functions), no known specific antidote. Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Small Fire : Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Large Fire : Water spray, fog or alcohol-resistant foam.

Unsuitable Extinguishing Media

Do not use straight stream of water.

Specific Hazards in Case of Fire

Fire will produce irritating gases.

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Cool containers with flooding quantities of water until well after fire is out. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Isolate hazard area and keep unauthorized personnel away. Stay uphill and/or upstream. Ventilate closed spaces before entering. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Recommended Equipment

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

Personal Precautions

Avoid breathing vapor or mist. Do not get on skin, eyes or clothing.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning up

Absorb Liquids in vermiculite, dry sand, earth, or similar inert material and deposit in sealed containers for disposal. Ventilate area after clean-up is complete.

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use. Avoid breathing vapor or mist. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. Eyewash stations and showers should be available in areas where this material is used and stored. All containers must be properly labelled. Do not get in eyes, on skin, or on clothing.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Report ventilation failures immediately.

Storage Room Requirements

Store in a cool, dry, well ventilated area, away from sources of ignition and incompatibilities. Keep containers securely sealed when not in use. Containers that have been opened must be carefully resealed to prevent leakage. Indoor storage should meet OSHA standards and appropriate fire codes. Empty containers retain residue and may be dangerous.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids.

Skin Protection

Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Use of chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and microorganisms. Examples of preferred glove barrier materials include: Butyl rubber, Polyethylene, Chlorinated polyethylene, Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Viton, Neoprene, Polyvinyl chloride ("PVC" or "vinyl"), Nitrile/butadiene rubber ("nitrile" or "NBR").

Full contact Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min

Material tested: Butoject® (KCL 897 / Aldrich Z677647, Size M).

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 30 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M).

Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold

limit value.

Chemical Name	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)	ACGIH STEL (mg/m3)	ACGIH STEL (ppm)	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations	OSHA TWA (mg/m3)
SILICA, AMORPHOUS								80 mg/m3 percent SiO ₂ +2
SILICA, CRYSTALLINE	0.025 (R)				A2	Pulmonary fibrosis; lung cancer	A2	[10 mg/m3 percent SiO ₂ +2 / 250 percent SiO ₂ +5 mppcf]; [30 mg/m3 percent SiO ₂ +2];
TITANIUM DIOXIDE	0.2 (R)(Nano), 2.5 (R)				A3	LRT irr; pneumoconiosis		15
VINYL TOLUENE		50		100	A4	URT & eye irr	A4	480

Chemical Name	OSHA TWA (ppm)	OSHA STEL (mg/m3)	OSHA STEL (ppm)	OSHA Carcinogen	OSHA Skin designation	OSHA Tables (Z1, Z2, Z3)	NIOSH TWA (mg/m3)	NIOSH TWA (ppm)
SILICA, AMORPHOUS	20 (b)					1,3	6	
SILICA, CRYSTALLINE	a					[1,3]; [3];	0.05e	
TITANIUM DIOXIDE						1		b
VINYL TOLUENE	100					1	480	100

Chemical Name	NIOSH STEL (mg/m3)	NIOSH STEL (ppm)	NIOSH Carcinogen
SILICA, AMORPHOUS			
SILICA, CRYSTALLINE			1
TITANIUM DIOXIDE			1
VINYL TOLUENE			

(C) - Ceiling limit, (R) - Respirable fraction, A2 - Suspected Human Carcinogen, A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, A4 - Not Classifiable as a Human Carcinogen, dam - Damage, irr - Irritation, LRT - Lower respiratory tract, URT - Upper respiratory tract

The information in this Section does not list non-hazardous components that might have relevant OSHA TWA (ppm), OSHA Tables (Z1, Z2, Z3), NIOSH TWA (mg/m3), NIOSH TWA (ppm), ACGIH TLV Basis, OSHA TWA (mg/m3) regulatory values, if they are present at less than 1%. Please contact manufacturer for more information.

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	N/A
Specific Gravity	N/A
% Solids By Weight	N/A

Appearance	Beige paste
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Odor Description	N/A
pH	N/A
Water Solubility	N/A
Flammability	N/A
Flash Point	N/A
Viscosity	N/A
Lower Explosion Level	N/A
Upper Explosion Level	N/A
Vapor Density	N/A
Freezing Point	N/A
Melting Point	N/A
Low Boiling Point	N/A
Evaporation Rate	N/A
Coefficient Water/Oil	N/A

SECTION 10) STABILITY AND REACTIVITY

Stability

Stable under normal storage and handling conditions.

Conditions To Avoid

Avoid heat, sparks, flame and contact with incompatible materials

Hazardous Reactions/Polymerization

Will not occur.

Incompatible Materials

Strong bases, acids, and oxidizing agents.

Hazardous Decomposition Products

Oxides of carbon.

SECTION 11) TOXICOLOGICAL INFORMATION

Acute Toxicity

Based on available data, the classification criteria are not met.

The Acute Toxicity Estimate (ATE) for an oral exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for a dermal exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for an inhalation (vapour) exposure to this mixture is >20 mg/l

Aspiration Hazard

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Based on available data, the classification criteria are not met.

Reproductive Toxicity

Based on available data, the classification criteria are not met.

Respiratory/Skin Sensitization

May cause an allergic skin reaction

Serious Eye Damage/Irritation

Causes serious eye irritation

Skin Corrosion/Irritation

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

Based on available data, the classification criteria are not met.

Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

Chronic Exposure

0014808-60-7 SILICA, CRYSTALLINE

Prolonged inhalation of respirable crystalline silica dust can result in lung disease (i.e. silicosis and/or lung cancer). Symptoms include coughing, shortness of breath, wheezing and reduced pulmonary function.

Potential Health Effects - Miscellaneous

0013463-67-7 TITANIUM DIOXIDE

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.'

0014808-60-7 SILICA, CRYSTALLINE

Is an IARC, NTP or OSHA carcinogen. Repeated overexposure to crystalline silica may lead to x-ray changes and chronic lung disease. Inhalation of high dust concentrations may cause: breathing difficulties, lung injury. WARNING: This chemical is known to the State of California to cause cancer.

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Based on available data, the classification criteria are not met.

Persistence and Degradability

No data available.

Bioaccumulative Potential

No data available.

Mobility in Soil

No data available.

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, state and local laws. Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes.

SECTION 14) TRANSPORT INFORMATION

	U.S. DOT Information	IMDG Information	IATA Information
UN Number:	Not Regulated	Not Regulated	Not Regulated
Proper shipping name:	N/A	N/A	N/A
Hazard Class:	Not Applicable	Not Applicable	Not Applicable
Packaging:	Not Applicable	Not Applicable	Not Applicable
Hazardous substance (RQ):	No Data Available		
Marine Pollutant:	No Data Available	No Data Available	
Note / Special Provision:	No Data Available	No Data Available	No Data Available
Toxic-Inhalation Hazard:	No Data Available		

SECTION 15) REGULATORY INFORMATION

Safety, health and environmental regulations

The product has been evaluated against the following relevant regulations: U.S.A Toxic Substance Control Act (TSCA) California Proposition 65 Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312 Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313 Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103

CAS	Chemical Name	% By Weight	Regulation List
0014808-60-7	SILICA, CRYSTALLINE	60.00% - 80.00%	SARA312, TSCA, CA_Prop65 - California Proposition 65, CA_Prop65_Type_Toxicity_Cancer - CA_Proposition65_Type_Toxicity_Cancer
0025013-15-4	VINYL TOLUENE	5.00% - 12.00%	CERCLA, SARA312, TSCA

0000109-16-0	POLYGLYCOLDIMETHACRYLATE	0.00% - 5.00%	SARA312, TSCA
0027813-02-1	HYDROXYALKYL METHACRYLATE	0.00% - 5.00%	SARA312, TSCA
0007631-86-9	SILICA, AMORPHOUS	0.00% - 5.00%	SARA312, TSCA
0013463-67-7	TITANIUM DIOXIDE	0.00% - 1.00%	SARA312, TSCA, CA_Prop65 - California Proposition 65, CA_Prop65_Type_Toxicity_Cancer - CA_Proposition65_Type_Toxicity_Cancer
0000106-51-4	QUINONE	0.00% - 1.00%	SARA313, CERCLA, SARA312, TSCA



WARNING: This product can expose you to chemicals including SILICA, CRYSTALLINE, which is [are] known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16) OTHER INFORMATION

Glossary

ACGIH - American Conference of Governmental Industrial Hygienists; CAS - Chemical Abstracts Service ; Chemtrec - Chemical Transportation Emergency Center; DSL - Domestic Substances List; ESL- Effects screening levels; GHS - "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations; HMIS - Hazardous Material Information Service; IATA - Dangerous Goods Regulations (DGR) for the air transport (IATA); IMDG - International Maritime Dangerous Goods Code; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OEL - Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL - Permissible Exposure Limit; SARA 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self Contained Breathing Apparatus; ppm - parts per million; STEL - Short-term exposure limit; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-weighted average; US DOT- US Department of Transportation.

Version 1.0:

Revision Date: Jan 12, 2023

First Edition.

Full text of H-Statements referred to under Section 3

- H372 Causes damage to organs through prolonged or repeated exposure.
- H316 Causes mild skin irritation
- H319 Causes serious eye irritation
- H315 Causes skin irritation
- H226 Flammable liquid and vapor
- H332 Harmful if inhaled
- H304 May be fatal if swallowed and enters airways
- H303 May be harmful if swallowed
- H313 May be harmful in contact with skin
- H317 May cause an allergic skin reaction
- H350 May cause cancer
- H335 May cause respiratory irritation
- H341 Suspected of causing genetic defects
- H361 Suspected of damaging fertility or the unborn child
- H401 Toxic to aquatic life
- H411 Toxic to aquatic life with long lasting effects

DISCLAIMER

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. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

SAFETY DATA SHEET

SECTION 1) IDENTIFICATION

Product ID: Wet-Cold Weather Bonding Adhesive Part B
Product Name: High strength, Low temperature adhesive
Revision Date: Jan 12, 2023 **Date Printed:** Jan 12, 2023
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: BLUESTONE PRODUCTS, a TCC Materials Company
Address: 2025 CENTRE POINTE BLVD, MENDOTA HEIGHTS, MN, US, 55120
Emergency Phone: 800-424-9300
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P103 - Read label before use.

Precautionary Statements - Prevention

P264 - Wash thoroughly after handling.

P280 - Wear protective gloves, protective clothing, eye protection/face protection.

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P272 - Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements - Response

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/attention.

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P333 + P313 - If skin irritation or a rash occurs: Get medical advice/attention.

P321 - Specific treatment (see First-Aid on this label).

P362 + P364 - Take off contaminated clothing. And wash it before reuse.

Precautionary Statements - Storage

No precautionary statement available.

Precautionary Statements - Disposal

P501 - Dispose of contents/container in accordance with local/national/international regulations.

Hazards Not Otherwise Classified (HNOC)

None.

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	GHS Classifications	% By Weight
0000094-36-0	BENZOYL PEROXIDE	Eye Irr. 2A, H319; Org. Perox. B, H241; Skin Irr. 3, H316; Skin Sens. 1, H317	10.00% - 25.00%
0000107-21-1	ETHYLENE GLYCOL	Acute Tox. Oral 4, H302; Eye Irr. 2A, H319; Skin Irr. 3, H316; STOT SE 1, H370	5.00% - 10.00%

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Remove contact lenses, if present and easy to do.

Continue rinsing for a duration of 15-20 minutes.

Take care not to rinse contaminated water into the unaffected eye or onto the face.

If eye irritation persists:

Get medical advice/attention.

Avoid direct contact. Wear chemical protective gloves, if necessary.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts).

Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes.

If skin irritation or a rash occurs:

Get medical advice/attention.

Wash contaminated clothing before re-use or discard.

Ingestion

Rinse mouth.

If you feel unwell/If concerned:

Call a POISON CENTER/doctor.

Most important symptoms and effects, both acute and delayed

No data available.

Indication of any immediate medical attention and special treatment needed

No specific treatment is required. 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. Treat according to symptoms (decontamination, vital functions), no known specific antidote. Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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Small Fire : Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Large Fire : Water spray, fog or alcohol-resistant foam.

Unsuitable Extinguishing Media

Do not use straight stream of water.

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Fire will produce irritating gases.

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Cool containers with flooding quantities of water until well after fire is out. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

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Emergency Procedure

Isolate hazard area and keep unauthorized personnel away. Stay uphill and/or upstream. Ventilate closed spaces before entering. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Recommended Equipment

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

Personal Precautions

Avoid breathing vapor or mist. Do not get on skin, eyes or clothing.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning up

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Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Report ventilation failures immediately.

Storage Room Requirements

Store in a cool, dry, well ventilated area, away from sources of ignition and incompatibilities. Keep containers securely sealed when not in use. Containers that have been opened must be carefully resealed to prevent leakage. Indoor storage should meet OSHA standards and appropriate fire codes. Empty containers retain residue and may be dangerous.

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Skin Protection

Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Use of chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and microorganisms. Examples of preferred glove barrier materials include: Butyl rubber, Polyethylene, Chlorinated polyethylene, Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Viton, Neoprene, Polyvinyl chloride ("PVC" or "vinyl"), Nitrile/butadiene rubber ("nitrile" or "NBR").

Full contact Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min

Material tested: Butoject® (KCL 897 / Aldrich Z677647, Size M).

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 30 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M).

Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)	ACGIH STEL (mg/m3)	ACGIH STEL (ppm)	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations	OSHA TWA (mg/m3)
BENZOYL PEROXIDE	5				A4	URT & skin irr	A4	5
ETHYLENE GLYCOL		25 (v)	10 (I,H)	50 (v)	A4	URT irr	A4	

Chemical Name	OSHA TWA (ppm)	OSHA STEL (mg/m3)	OSHA STEL (ppm)	OSHA Carcinogen	OSHA Skin designation	OSHA Tables (Z1, Z2, Z3)	NIOSH TWA (mg/m3)	NIOSH TWA (ppm)
BENZOYL PEROXIDE						1	5	
ETHYLENE GLYCOL								

Chemical Name	NIOSH STEL (mg/m3)	NIOSH STEL (ppm)	NIOSH Carcinogen
BENZOYL PEROXIDE			
ETHYLENE GLYCOL			

A4 - Not Classifiable as a Human Carcinogen, irr - Irritation, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	1.45
Specific Gravity	N/A
% Solids By Weight	N/A

Appearance	Gray paste
Odor Description	N/A
pH	N/A
Water Solubility	N/A
Flammability	N/A
Flash Point	N/A
Viscosity	N/A
Lower Explosion Level	N/A
Upper Explosion Level	N/A
Vapor Density	N/A
Freezing Point	N/A
Melting Point	N/A
Low Boiling Point	N/A
Evaporation Rate	N/A
Coefficient Water/Oil	N/A

SECTION 10) STABILITY AND REACTIVITY

Stability

Stable under normal storage and handling conditions.

Conditions To Avoid

Avoid heat, sparks, flame and contact with incompatible materials

Hazardous Reactions/Polymerization

Will not occur.

Incompatible Materials

Strong bases, acids, and oxidizing agents.

Hazardous Decomposition Products

Oxides of carbon.

SECTION 11) TOXICOLOGICAL INFORMATION

Acute Toxicity

Based on available data, the classification criteria are not met.

The Acute Toxicity Estimate (ATE) for an oral exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for a dermal exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for an inhalation (vapour) exposure to this mixture is >20 mg/l

Aspiration Hazard

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Based on available data, the classification criteria are not met.

Reproductive Toxicity

Based on available data, the classification criteria are not met.

Respiratory/Skin Sensitization

May cause an allergic skin reaction

Serious Eye Damage/Irritation

Causes serious eye irritation

Skin Corrosion/Irritation

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure

Based on available data, the classification criteria are not met.

0000107-21-1 ETHYLENE GLYCOL

The substance may cause effects on kidneys as a result of repeated ingestion.

Specific Target Organ Toxicity - Single Exposure

Based on available data, the classification criteria are not met.

Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

0000107-21-1 ETHYLENE GLYCOL

The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

0000107-21-1 ETHYLENE GLYCOL

LD50 (oral, rat): 5.89 g/kg; 8.54 g/kg; 13.0 g/kg (5)

LD50 (oral, mouse): 7.5 g/kg; 15.28 g/kg (5,6)

LD50 (oral, guinea pig): 6.6 g/kg; 11.0 g/kg (5)

LD50 (oral, rabbit): 5.0 g/kg (5)

LD50 (dermal, rabbit): 9.5 g/kg (6)

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Based on available data, the classification criteria are not met.

Persistence and Degradability

0000107-21-1 ETHYLENE GLYCOL

Readily biodegradable.

Bioaccumulative Potential

0000107-21-1 ETHYLENE GLYCOL

No potential for bioaccumulation.

Mobility in Soil

0000107-21-1 ETHYLENE GLYCOL

Adsorption to solid soil phase is not expected. Ethylene glycol will preferentially be distributed into the compartment water.

Other Adverse Effects

No data available.

Results of the PBT and vPvB assessment

0000107-21-1 ETHYLENE GLYCOL

The substance is not PBT / vPvB.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, state and local laws. Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes.

SECTION 14) TRANSPORT INFORMATION

	U.S. DOT Information	IMDG Information	IATA Information
UN Number:	Not Regulated	Not Regulated	Not Regulated
Proper shipping name:	N/A	N/A	N/A
Hazard Class:	Not Applicable	Not Applicable	Not Applicable
Packaging:	Not Applicable	Not Applicable	Not Applicable
Hazardous substance (RQ):	No Data Available		
Marine Pollutant:	No Data Available	No Data Available	
Note / Special Provision:	No Data Available	No Data Available	No Data Available
Toxic-Inhalation Hazard:	No Data Available		

SECTION 15) REGULATORY INFORMATION

Safety, health and environmental regulations

The product has been evaluated against the following relevant regulations: U.S.A Toxic Substance Control Act (TSCA) California Proposition 65 Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312 Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313 Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103

CAS	Chemical Name	% By Weight	Regulation List
0000094-36-0	BENZOYL PEROXIDE	10.00% - 25.00%	SARA313, SARA312, TSCA
0000107-21-1	ETHYLENE GLYCOL	5.00% - 10.00%	SARA313, CERCLA, SARA312, TSCA, CA_Prop65 - California Proposition 65, CA_Prop65_Type_Toxicity_Develop - CA_Proposition65_Type_Toxicity_Developmental



WARNING: This product can expose you to chemicals including ETHYLENE GLYCOL, which is [are] known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16) OTHER INFORMATION

Glossary

ACGIH - American Conference of Governmental Industrial Hygienists; CAS - Chemical Abstracts Service ; Chemtrec - Chemical Transportation Emergency Center; DSL - Domestic Substances List; ESL - Effects screening levels; GHS - "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations; HMIS - Hazardous Material Information Service; IATA - Dangerous Goods Regulations (DGR) for the air transport (IATA); IMDG - International Maritime Dangerous Goods Code; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OEL - Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL - Permissible Exposure Limit; SARA 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self Contained Breathing Apparatus; ppm - parts per million; STEL - Short-term exposure limit; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-weighted average; US DOT- US Department of Transportation.

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Full text of H-Statements referred to under Section 3

H370	Causes damage to organs.
H316	Causes mild skin irritation
H319	Causes serious eye irritation
H302	Harmful if swallowed
H241	Heating may cause a fire or explosion
H317	May cause an allergic skin reaction

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