

G.J. CHEMICAL COMPANY, INC. SAFETY DATA SHEET

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME -----> **Benzyl Alcohol**

PRODUCT NUMBER(S) ----- > 112400, 112410, 112600, 112840 and 113010

TRADE NAMES/SYNONYMS-----> alpha-hydroxytoluene, benzenemethanol
Phenylmethanol

1.2 RELAVENT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST:

Industrial: Solvent Odorant: component, Photosensitive agent and other photo-chemicals, Flow improver, viscosity adjuster, Laboratory chemical, Personal care products: component, Paints, coatings, inks: component.

USES ADVISED AGAINST: No uses advised against.

CAS-NO: 100-51-6

CHEMICAL FAMILY: Alcohol, aromatic

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: **G.J. CHEMICAL CO., INC.**

Address: **40 VERONICA AVENUE
SOMERSET, NJ 08873**

Telephone: **1-973-589-1450**

Fax: **1-973-589-3072**

1.4 Emergency Telephone Number

Emergency Phone: **1-800-424-9300 (CHEMTREC)**

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910 (OSHA HCS)

General Hazards: This product is classified as hazardous according to current regulations.

Physical Hazards: None

Health Hazards:

Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 4), H312
Eye irritation (Category 2), H319

Environmental Hazards:
Acute aquatic toxicity (Category 2)

2.2 GHS Label elements, including precautionary statements



Pictogram

GHS07

Signal Word: **WARNING!**

Hazard statement(s)

H302 + H312 Harmful if swallowed or in contact with skin

H315 Causes skin irritation.

H332 Harmful if inhaled.

H401 Toxic to aquatic life.

Precautionary statement(s)

Prevention:

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

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.

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

P302 + P352 + P312 IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell.

P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3. Other hazards: Caution! Substance is absorbed through the skin

3. INGREDIENTS

3.1. SUBSTANCE:

INGREDIENT	CAS No.	% BY WT. RANGE	CLASSIFICATION
Benzyl Alcohol	100-51-6 EC-No.202-859-9 Index-No.603-057-00-5 Reg.-No. 01-2119492630-38-XXXX	100	Acute toxicity, Oral (Category 4) Acute toxicity, Inhalation (Category 4) Acute toxicity, Dermal (Category 4) Skin irritation (Category 2) Acute aquatic toxicity (Category 2)

3.2 MIXTURE: Not applicable.

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

INHALATION: BENZYL ALCOHOL

****FIRST AID- Remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial respiration. Keep person warm and at rest. Treat symptomatically and supportively. Get medical attention immediately.**

SKIN CONTACT: BENZYL ALCOHOL

****FIRST AID- Remove contaminated clothing and shoes immediately. Wash affected area with soap or mild detergent and large amounts of water until no evidence of chemical remains (approximately 15-20 minutes). Get medical attention immediately.**

EYE CONTACT: BENZYL ALCOHOL

****FIRST AID- Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15-20 minutes). Remove contact lenses, if worn, after initial flushing. Get medical attention immediately.**

INGESTION: BENZYL ALCOHOL

****FIRST AID- Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention immediately.**

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

4.2.1 Acute symptoms:

Inhalation: EXPOSURE TO HIGH CONCENTRATIONS: Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Nausea. Headache. Dizziness.

Skin contact: Red skin. Disturbed sensation of pain.

Eye contact: Redness of the eye tissue. Lacrimation. Irritation of the eye tissue. Visual disturbances.

Ingestion: AFTER INGESTION OF HIGH QUANTITIES: Central nervous system depression. Headache. Dizziness. Nausea. Vomiting. Diarrhea. Coordination disorders. Disturbances of consciousness

4.2.2 Delayed symptoms: No effects known.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

Specific details on antidote: No recommendation given.

5. FIRE FIGHTING MEASURES

FLASH POINT: 100.4°C (205°F) TCC

LEL %: 1.3(V)

AUTO-IGNITION TEMP: 436°C (815°F)

UEL %: 13(V)

UNIFORM FIRE CODE: Combustible Liquid Class IIIB

5.1 EXTINGUISHING MEDIA:

Suitable extinguishing media: Foam--> x CO2--> x Dry Chemical--> x Water-fog--> x Other-->

Unsuitable extinguishing media: Do not use waterjet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR

MIXTURE: FIRE AND EXPLOSION HAZARD: DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME.

VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK.

Keep containers tightly closed. Combustible liquid; isolate from all sources of ignition. Closed containers may explode when exposed to extreme heat.

Sensitivity to Mechanical Impact: No

Sensitivity to Static Discharge: No

CONDITIONS OF FLAMMABILITY: Not Flammable or Combustible

COMBUSTION PRODUCTS: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides and other unidentified organic compounds evolve when this material undergoes combustion.

5.3 ADVICE FOR FIREFIGHTERS: Shut off source. Water fog may be used to cool closed containers to prevent pressure build up and possible auto ignition or explosion when exposed to extreme heat. A solid water jet is ineffective as an extinguishing medium. Wear NIOSH/MSHA self-contained breathing apparatus (SCBA) for confined spaces and where there is exposure to vapors. Use full fire-fighting protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations.

6.2 ENVIRONMENTAL PRECAUTIONS:

Keep out of water sources and sewers, notify authorities if liquid enters sewers or public waters.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

Methods for cleanup and containment:

Use explosion proof equipment. Shut off valves, contain spill, keep out of water sources and sewers, for smaller spills add non-flammable absorbent in spill area.

For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent.

Methods for disposal:

Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Clean contaminated area with an excess of water. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations.

6.4 REFERENCE TO OTHER SECTIONS: See Sections 8 and 13.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING: Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid work practice, that may release volatile components in the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close containers. Avoid contact with aluminum and iron. Containers may be steel, stainless steel, polypropylene or glass. Do not take internally.

Hygiene measures: Wash hands thoroughly after handling.

STATIC HAZARD: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not be sufficient.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Follow maximum allowed pile heights specified in the BOCA codes or the NFPA manual. Local fire authorities should be notified for storage of this material in any quantity. Local permits are required for storage in warehouse quantities. Store large quantities only in cool, dry areas in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not contact with oxidizing materials. Keep containers closed when not in use. Do not take internally.

7.2.1 Safe storage requirements: Storage temperature: -12 °C - 50 °C.

May be stored under nitrogen. Maximum storage time: 270 day(s).

7.2.2 Keep away from: Heat sources, combustible materials, oxidizing agents, (strong) acids, metals, water/moisture.

7.2.3 Suitable packaging material: Steel, stainless steel, polypropylene, glass.

7.2.4 Non suitable packaging material: Aluminum, iron.

CONTAINER WARNINGS: Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner.

7.3 SPECIFIC END USES: Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROL (PERSONAL PROTECTION)

8.1 CONTROL PARAMETERS

Ingredient	CAS No.	% by WT. Range	Exposure Limits
Benzyl Alcohol	100-51-6 EC-No.202-859-9 Index-No.603-057-00-5 Reg.-No. 01-2119492630-38-XXXX	100	10ppm (WEEL)

Key: (PEL) = Permissible Exposure Limit OSHA
(TLV) = Threshold Limit Value OSHA & ACGIH
(STEL) = Short Term Exposure Limit ACGIH
(WEEL) = USA. Workplace Environmental Exposure Levels
(TWA) = Time Weighted Average
CAS = Chemical Abstracts Registry Number
IDLH = Immediate Danger to Life and Health
N.E. =None Established

8.2 EXPOSURE CONTROLS

EXPOSURE GUIDELINES: Consider the potential hazards of this material (Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

ENGINEERING CONTROLS> Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

RESPIRATORY PROTECTION: The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA):

For known vapor concentrations use a NIOSH/MSHA air purifying respirator with full face-piece and organic vapor cartridge for exposures >1 <10 times WEEL. For exposures greater than 10 times WEEL or for unknown vapor concentrations use NIOSH positive pressure self contained breathing apparatus with full face-piece.

BODY CLOTHING: Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse. Users should determine acceptable performance characteristics of protective clothing.

SKIN PROTECTION: Employee must wear appropriate protective gloves to prevent contact with this substance.

Gloves

Materials	Thickness	Breakthrough time
viton	0.70 mm	> 480 minutes
nitrile rubber	0.38 - 0.425 mm	> 240 minutes
butyl rubber	0.30 - 0.50 mm	> 480 minutes

HYGIENE: Use good personal hygiene practices, wash hands before eating, drinking, smoking or using toilet facilities.

EYE/FACE PROTECTION: Use safety eyewear with splash-guards or face shield. Shower and eyewash should be located in an easily accessible location to the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Benzyl Alcohol 100-51-6

APPEARANCE:	Clear Liquid
COLOR:	Colorless
ODOR:	Fruity Odor
ODOR THRESHOLD:	No Data Available
pH:	No Data Available
MOLECULAR WEIGHT:	108.14 amu
MELTING POINT:	-16 to -13 °C (3 - 9 °F)
BOILING POINT:	203 - 205 °C (397 - 401 °F)
SPECIFIC GRAVITY:	1.045@25°C
DENSITY (25°C):	1.045@25°C
VAPOR PRESSURE:	0.094 mm Hg @ 25°C (77.0°F)
VAPOR DENSITY:	3.73
WATER SOLUBILITY:	33 g/l at 20 °C (68 °F)
PARTITION COEFFICIENT N-OCTANOL/WATER	log Pow: 1.1
FLASH POINT:	205°F
EVAPORATION RATE (BUTYL ACETATE=1):	0.007
UPPER FLAMMABILITY LIMIT:	13% (V)
LOWER FLAMMABILITY LIMIT:	1.3% (V)
AUTO IGNITION TEMPERATURE:	815°F
DECOMPOSITION TEMPERATURE:	No data available
VISCOSITY:	No data available
EXPLOSIVE PROPERTIES:	No data available

OXIDIZING PROPERTIES:	No data available
9.2 OTHER INFORMATION:	No data available
SPECIFIC CONDUCTIVITY	27 µS/m
CRITICAL TEMPERATURE	403 °C
CRITICAL PRESSURE	45585 hPa
SURFACE TENSION	40 mN/m ; 20 °C
RELATIVE DENSITY	1.0
SATURATED VAPOR/AIR MIXTURE	
DISSOCIATION CONSTANT	15.4 ; 25 °C ; pKa
ABSOLUTE DENSITY	1045 kg/m ³

10. STABILITY AND REACTIVITY INFORMATION

10.1 REACTIVITY: Upon combustion: CO and CO₂ are formed. Reacts violently with strong oxidizers. Possible explosive reaction on exposure to temperature rise with acids.

10.2 CHEMICAL STABILITY: Unstable () Stable (X) Hygroscopic

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: Vapors may form explosive mixtures with air.

HAZARDOUS POLYMERIZATION: May occur () Will not occur (X)

10.4 CONDITIONS TO AVOID: --> Reacts with air to form benzaldehyde. Heat, Sparks, Pilot Lights, Static Electricity, and Open Flame. A mixture of benzyl alcohol and 58% sulfuric acid decomposed violently when heated to 180°C. Benzyl alcohol containing 1.4% hydrogen bromide and 1.1% of an iron (II) salt polymerized exothermally when heated above 100°C.

10.5 INCOMPATIBLE MATERIALS --> Strong oxidants such as liquid chlorine, oxygen, sodium hypochlorite, inorganic acids e.g. hydrochloric acid hydrogen peroxide and water. Aluminum and iron.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS --> Fumes, Smoke, Carbon Monoxide, Carbon Dioxide.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x

ACUTE HEALTH EFFECTS:

Effects of overexposure:

Eye> Irritating may cause redness, lacrimation and visual disturbance;

Skin> Moderately irritating, red skin and disturbing sensation of pain;

Inhalation> Irritation of the respiratory tract or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion, unconsciousness or coma;

Ingestion> Irritation of gastrointestinal tract; followed by CNS depression, headache, dizziness, nausea, vomiting, diarrhea possible of loss of consciousness.

Chronic: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Typical symptoms are cardiovascular disorders, sweetish taste in the mouth, nausea, vomiting, loss of appetite, strong thirst, burning of eyes and bleeding from the nose. Damage may occur to the kidney or liver.

Medical Conditions Aggravated by Exposure> Inhalation may aggravate a pre-existing lung disease, skin contact may aggravate an existing dermatitis.

ACUTE TOXICITY:

The effects of overexposure shown in Section II are based on acute toxicity profiles. Typical values are:

Ingredient	 Oral LD50 (Rat)	 Skin LD50 (Rabbit)	 Inhalation LC50	
Benzyl Alcohol	 1230mg/kg	 2000mg/kg	 4.178mg/kg/4hr	

Skin corrosion/irritation: Not classified (based on available data, the classification criteria are not met). Chemical Name Skin irritation Species Benzyl alcohol Non-irritant (OECD 404) Rabbit/ adult

Serious eye damage/irritation: Causes serious eye irritation - Category 2.
Chemical Name Eye irritation Species Benzyl alcohol Irritant (OECD 405) Rabbit/ adult

Respiratory or skin sensitization: Not classified (based on available data, the classification criteria are not met). This material has a low potential to cause allergic skin reactions, however cases of skin sensitization have been reported.
Chemical Name: Benzyl Alcohol; Skin sensitization: Non-sensitizer; Species: Guinea pig and Human Patch

MUTAGENIC EFFECTS:

Mutagenicity in vitro:

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)		Experimental value
Negative with Metabolic activation, negative without metabolic activation	Equivalent to OECD 473	CHL/IU cells		Experimental value
Limited positive test result	Equivalent to OECD 476	Mouse (lymphoma L5178Y cells)		Experimental value

Mutagenicity in vivo:

Result	Method	Exposure time	Test Substrate	Organ	Value
Negative	Equivalent to OECD 474		Mouse (male)	Bone Marrow	Exp.

Conclusion: Not classified for mutagenic or genotoxic toxicity

CARCINOGEN STATUS:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

REPRODUCTIVE TOXICITY: Not classified for reprotoxic or developmental toxicity. Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System) no data available.

Specific target organ toxicity (STOT-RE) - repeated exposure (Globally Harmonized System) no data available.

11.2 ADDITIONAL DATA:

Chronic effects from short and long-term exposure:

benzyl alcohol ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:

Gastrointestinal complaints. Loss of weight. Headache. Skin rash/inflammation stupor, narcosis

Central nervous system depression

Liver - Irregularities - Based on Human Evidence

RTECS-No.DN3150000

12. ECOLOGICAL INFORMATION

DANGEROUS TO AQUATIC LIFE IN HIGH CONCENTRATIONS

May be dangerous if it enters water intakes.

Notify local health and pollution control officials.

Notify operators of nearby water intakes.

12.1 ACUTE AQUATIC TOXICITY:

Toxicity to Fish:

LC-50 96hour : 10ppm (Lepomis Macrochirus) Blue Gill

Toxicity to invertebrates:

EC-50 48hour: 400mg/l (Daphnia Magna) Water Flea

Toxicity to Algae:

EC-50 72hour: 2600mg/l (Algae)

12.2 PERSISTANCE AND DEGRADABILITY:

Biodegradation BOD5 = 62

Readily biodegradable in water 92-96%, 14days, 95-97% 21 days.

12.3 BIOACCUMULATIVE POTENTIAL: log Pow 1.1 Slightly or not bioaccumulative. Not dangerous for the ozone layer

12.4 MOBILITY IN SOIL: No (test) data on mobility of the substance available

12.5 RESULTS OF PBT AND vPvB:

PBT assessment results: This substance is not classified as PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS: benzyl alcohol;

Do not allow this material to enter streams, sewers and other waterways.

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS: Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. Incinerate under controlled conditions in a permitted facility.

CONTAMINATED PACKAGING: Dispose of as unused product.

14. TRANSPORT INFORMATION

Land Transport (DOT)

- 14.1 USDOT ID Number-----> N/A
- 14.2 USDOT Shipping Name-----> Not DOT Regulated
- 14.3 USDOT Hazard Classification-----> N/A
 USDOT Label Codes-----> N/A
- 14.4 USDOT Package Code-----> N/A
- 14.5 Environmental hazard-----> No
- 14.6 Special precautions for user-----> None

Sea Transport (IMDG)

- 14.1 UN Number:-----> N/A
- 14.2 Proper Shipping Name-----> Not Dangerous Goods
- 14.3 Hazard Class:-----> N/A
 USDOT Label Codes-----> N/A
- 14.4 Packing Group:-----> N/A
- 14.5 Environmental hazard-----> No

Air Transport (IATA)

- 14.1 UN Number:-----> UN3334
- 14.2 Proper Shipping Name:-----> Aviation regulated liquid, n.o.s.
 (Benzyl alcohol)
- 14.3 Hazard Class:-----> 9
 USDOT Label Codes-----> 9
- 14.4 Packing Group:-----> N/A
- 14.5 Environmental hazard-----> No

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

SARA TITLE III (Superfund Amendment and Reauthorization Act)

SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355)- Not Listed

SECTION 313: Toxic Chemicals Listing (40 CFR 372.65) - Not Listed

SECTION 311/312: Hazard Categorization (40 CFR 370) - Acute Health Hazard, Chronic Health Hazard, and Reactive Hazard

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)

SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Not Listed

Reportable Quantity - None

SECTION 101(14) Reportable Quantity: None

Massachusetts Right to Know Components

Benzyl alcohol CAS-No. 100-51-6

Pennsylvania Right to Know Components

Benzyl alcohol CAS-No. 100-51-6

New Jersey Right to Know Components

Benzyl alcohol CAS-No. 100-51-6

California Prop 65 Components

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

TSCA (Toxic Substance Control Act)

Benzyl Alcohol CAS 100-51-6 is listed on the TSCA Inventory.

International Inventories:

<u>Country or Region</u>	<u>Inventory Name</u>	<u>On inventory yes/no</u>
<u>Australia</u>	Australian Inventory of Chemical Substances (AICS)	Yes
<u>Canada</u>	Domestic Substances List (DSL)	Yes
<u>Canada</u>	Non-Domestic Substances List (NDSL)	No
<u>China</u>	Inventory of Existing Chemical Substances in China (IECSC)	Yes
<u>Europe</u>	European Inventory of Existing Commercial Chemicals Substances (EINECS)	Yes
<u>Europe</u>	European List of Notified Chemical Substances (ELINCS)	No
<u>Japan</u>	Inventory of Existing and New Chemical Substances (ENCS)	Yes
<u>Japan</u>	Industrial Safety & Health Law Inventory (ISHL)	Yes
<u>Korea</u>	Existing Chemicals List (ECL)	Yes
<u>Mexico</u>	National Inventory of Chemical Substances (INSQ)	Yes
<u>New Zealand</u>	New Zealand Inventory	Yes
<u>Philippines</u>	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

<u>Switzerland</u>	Inventory of Notified New Substances (CHINV)	Yes
<u>Taiwan</u>	National Existing Chemical Inventory (NECI)	Yes
<u>United States & Puerto Rico</u>	Toxic Substances Control Act Inventory	Yes

15.2 CHEMICAL SAFETY ASSESSMENT: A chemical safety assessment has been carried out for this substance.

16. OTHER INFORMATION:

HMIS (Hazardous Materials Identification System)

Hazard Rating:

4-Extreme

3-High

2-Moderate

1-Slight

0-Insignificant

NFPA RATINGS (SCALE 0-4): Health=2 Fire=1 Reactivity=0
HMIS RATINGS (SCALE 0-4): Health=2 Fire=1 Reactivity=0 PPE=G

Text of hazard statement codes in Section 3:

H302 + H312 Harmful if swallowed or in contact with skin (Category 4)

H319 Causes serious eye irritation. (Category 2)

H332 Harmful if inhaled (Category 4)

H401 Toxic to aquatic life. (Category 2)

Date of preparation-----> April 5, 2007

Revision Number-----> 1.8

Revision Content-----> Updated sections: 1, 3, 4, 5, 8 10, 11, 12 and 15

Revision Date-----> January 7, 2019

Prepared by-----> T.G. Fenstermaker Jr.

Acronyms:

ACGIH	-	American Conference of Governmental Industrial Hygienists
AIHA	-	American Industrial Hygiene Association
ANSI	-	American Nation Standards Institute
API	-	American Petroleum Institute
CERCLA	-	Comprehensive Emergency Response, Compensation, and Liability Act
DOT	-	U.S. Department of Transportation
EPA	-	U.S. Environmental Protection Agency
HMIS	-	Hazardous Materials Information System
IARC	-	International Agency For Research On Cancer
MSHA	-	Mine Safety and Health Administration
NFPA	-	National Fire Protection Association
NIOSH	-	National Institute of Occupational Safety and Health
NOIC	-	Notice of Intended Change (Proposed change to ACGIH TLV)
NTP	-	National Toxicology Program
OPA	-	Oil Pollution Act of 1990
OSHA	-	U.S. Occupational Safety & Health Administration
PEL	-	Permissible Exposure Limit (OSHA)
RCRA	-	Resource Conservation and Recovery Act
REL	-	Recommended Exposure Limit (NIOSH)
SARA	-	Superfund Amendments and Reauthorization Act of 1986 Title III

- SCBA - Self-Contained Breathing Apparatus
- STEL - Short-Term Exposure Limit (generally 15 minutes)
- TLV - Threshold Limit Value
- TSCA - Toxic Substances Control Act
- TWA - Time Weighted Average (8hr.)
- WHMIS - Canadian Workplace Hazardous Materials Information System

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