Safety Data Sheet (SDS)
International (GHS)

Revision date: 1/21/2022

SECTION 1: Identification

Product identifiers:

Product trade name: Kalama* Benzyl Alcohol Technical
Company product number: BZALCTECH
Other means of identification: Benzene methanol; Phenylcarbinol; alpha-Hydroxytoluene; Phenylmethanol; (Hydroxymethyl)benzene; alpha-Toluenol

Recommended use of the chemical and restrictions on use:

Uses: Intermediate, Odor agent, Laboratory chemical, Photosensitive agent and other photochemical, Solvent, Viscosity adjuster, Flow improver
Restrictions on use: None identified

Details of the supplier:

Manufacturer/Supplier:
Emerald Kalama Chemical, LLC
1296 NW Third Street
Kalama, WA 98625 United States
Telephone: +1-360-673-2550

1499 SE Tech Center Place, Suite 300
Vancouver, WA 98683 United States
Telephone: +1-360-954-7100

For further information about this SDS: Email: product.compliance@emeraldmaterials.com

Emergency telephone number:

ChemTel (24 hours): 1-800-255-3924 (USA); +1-813-248-0585 (outside USA); 1-300-954-583 (Australia); 000-800-100-4086 (India).

SECTION 2: Hazard(s) identification

Classification of the substance or mixture:

Acute Toxicity, Oral, category 4 , H302
Acute Toxicity, Dermal, category 5, H313
Eye Irritation, category 2, H319
Acute Toxicity, Inhalation, category 4 , H332

Label elements:

Hazard pictogram(s):

Signal word:
Warning

Hazard statements:
H302 Harmful if swallowed.
H313 May be harmful in contact with skin.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.

Precautionary statements:
P261 Avoid breathing dust/fume/gas/mist/vapours/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.
P280 Wear eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTRE/doctor if you feel unwell.
P330 Rinse mouth.

P337+P313 If eye irritation persists: Get medical advice/attention.
P501 Dispose of contents/container in accordance with local, regional and international regulations.

Supplemental information: No Additional Information

Classification and hazards statements are listed according to the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Regulations in individual countries/regions may determine which classifications and hazard statements are applicable based on adopted hazard classes and categories. Precautionary statements are listed according to the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Annex III. Regulations in individual countries/regions may determine which statements are required on the product label. See product label for specifics.

Other hazards: No Additional Information

See Section 11 for toxicological information.

SECTION 3: Composition/information on ingredients

Substance:

CAS-No.	Chemical Name	Weight%
0000100-51-6	Benzyl alcohol	99-100

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits.

SECTION 4: First-aid measures

Description of first aid measures:

General: If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

Eye contact: Immediately flush eyes with plenty of clean water for an extended time, not less than fifteen (15) minutes. Flush longer if there is any indication of residual chemical in the eye. Ensure adequate flushing of the eyes by separating the eyelids with fingers and roll eyes in a circular motion. If eye irritation persists: Get medical advice/attention.

Skin contact: Immediately remove contaminated clothing and shoes. Wash the affected area with plenty of soap and water until no evidence of the chemical remains (at least 15-20 minutes). Launder clothing before reuse. If skin irritation occurs: Get medical advice/attention.

Inhalation: If affected, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a POISON CENTER or doctor/physician if you feel unwell.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse out the mouth with water. Get medical attention immediately.

Protection of first aid responders: Wear proper personal protective clothing and equipment.

Most important symptoms and effects, both acute and delayed: Dizziness, Drowsiness, Headache, Irritation, Nausea. Preexisting sensitization, skin and/or respiratory disorders or diseases may be aggravated. See section 11 for additional information.

Indication of any immediate medical attention and special treatment needed, if necessary: Treat symptomatically.

SECTION 5: Fire-fighting measures

Extinguishing media:

Suitable: Use water spray, ABC dry chemical, foam or carbon dioxide. Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water spray may be used to flush spills away from exposures.

Unsuitable: None known.

Special hazards arising From the chemical:

Unusual fire/explosion hazards: Product is not considered a fire hazard, but will burn if ignited. Product can form a flammable vapor/air mixture at temperatures at or above the flash point. Closed container may rupture (due to build up in pressure) when exposed to extreme heat.

Hazardous combustion products: Irritating or toxic substances will be emitted upon burning, combustion or decomposition. See section 10 (Hazardous decomposition products) for additional information.

Special protective equipment and precautions for fire-fighters: Wear self-contained breathing apparatus (SCBA) equipped with a full facepiece and operated in a pressure-demand mode (or other positive pressure mode) and approved protective clothing. Personnel without suitable respiratory protection must leave the area to prevent significant exposure to hazardous gases from combustion, burning or decomposition. In an enclosed or poorly ventilated area, wear SCBA during cleanup immediately after a fire as well as during the attack phase of firefighting operations.

See section 9 for additional information.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 for recommendations on the use of personal protective equipment. If spilled in an enclosed area, ventilate. Eliminate ignition sources. Personal Protective Equipment must be worn.

Environmental precautions: Do not flush liquid into public sewer, water systems or surface waters.

Methods and materials for containment and cleaning up: Contain by diking with sand, earth or other non-combustible material. Wear proper personal protective clothing and equipment. Absorb spill with an inert material. Place into labeled, closed container; store in safe location to await disposal. Change contaminated clothing and launder before reuse.

SECTION 7: Handling and storage

Precautions for safe handling: As with any chemical product, use good laboratory/workplace procedures. Do not cut, puncture, or weld on or near the container. Do not breathe dust, vapor, aerosol, mist or gas. Do not ingest, taste, or swallow. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well-ventilated conditions. Avoid eye and skin contact. Wash contaminated clothing before reuse. Provide eyewash fountains and safety showers in the work area.

Conditions for safe storage, including any incompatibilities: Store cool and dry, under well-ventilated conditions. Store this material away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning. Shelf life: 24 months. Avoid storage in aluminum or iron containers. Empty container contains residual product which may exhibit hazards of product. Product can easily oxidize. It is recommended that opened containers be padded with nitrogen. Protect from light.

SECTION 8: Exposure controls / personal protection

Control parameters:

Occupational exposure limits (OEL):

Chemical Name	ACGIH - TWA/Ceiling		ACGIH - STEL	
Benzyl alcohol	N/E		N/E	
Chemical Name	**Australia**	**New Zealand**	**Philippines**	**Singapore**
Benzyl alcohol	N/E	N/E	N/E	N/E
Chemical Name	**Japan ISHL**	**Japan JSOH**	**Taiwan**	**Malaysia**
Benzyl alcohol	N/E	25 mg/m3 Ceiling (Group 2 skin sensitizer)	N/E	N/E

N/E=Not established (no exposure limits established for the listed substances for listed country/region/organization).

Exposure controls:

Appropriate engineering controls: Always provide effective general and, when necessary, local exhaust ventilation to draw spray, aerosol, fume, mist and vapor away from workers to prevent routine inhalation. Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Safety glasses or goggles required.
Skin and body protection: Wear chemical resistant (impervious) gloves. Use good laboratory/workplace procedures including personal protective clothing: labcoat, safety glasses and protective gloves.
Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. Wear an approved respirator (e.g., an organic vapor respirator, a full face air purifying respirator for organic vapors, or a self-contained breathing apparatus) whenever exposure to aerosol, mist, spray, fume or vapor exceed the applicable exposure limit(s) of any chemical substance listed in this SDS. Gas mask with filter Type A.
Further information: Eyewash fountains and safety showers are recommended in the work area.

SECTION 9: Physical and chemical properties

Form:	Liquid	**pH:**	Not Available
Appearance:	Colorless	**Relative density:**	1.045 @ 25 °C
Odor:	Slight aromatic	**Partition coefficient (n-octanol/water):**	1.05 @ 20°C
Odor threshold:	Not Available	**% Volatile by weight:**	100%
Solubility in water:	40 g/L @ 25°C	**VOC:**	100%
Evaporation rate:	< 0.01	**Boiling point °C:**	205 °C @ 1013 hPa
Vapor pressure:	7 Pa @ 20 °C	**Boiling point °F:**	401.5 °F @ 1013 hPa
Vapor density:	3.7 (Air=1)	**Flash point:**	99-100 .4 °C (210-212.7 °F) Closed Cup

Viscosity:	5.8-8 cP @ 20°C	**Auto-ignition temperature:**	436 °C (817 °F)
Melting point/Freezing point:	-15.4- -15.3 °C (4.3-4.5 °F)	**Flammability (solid, gas):**	Not Applicable (liquid)
Oxidizing properties:	Not oxidizing	**Flammability or explosive limits:**	LFL/LEL: 1.3%
Explosive properties:	Not explosive		UFL/UEL: 13%
Decomposition temperature:	Not Available	**Surface tension:**	39 mN/m @ 20°C (1g/L)

Other information: Amounts specified are typical and do not represent a specification.

SECTION 10: Stability and reactivity

Reactivity: Can react violently in contact with strong oxidizing agents, isocyanates, acetaldehyde, lithium aluminum hydride, aluminum alkyl compounds, strong mineral acids (i.e. sulfuric acid), and hydrogen bromide.

Chemical stability: This product is stable. In the presence of air, benzyl alcohol will very slowly oxidize to benzaldehyde.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Conditions to avoid: Avoid exposure to air, moisture, ignition sources and elevated temperatures.

Incompatible materials: Avoid strong acids and oxidizing agents. Avoid contact with iron and aluminum. Will attack some form of plastics.

Hazardous decomposition products: Carbon dioxide and carbon monoxide. Benzaldehyde.

SECTION 11: Toxicological information

Information on likely routes of exposure:

General: Caution must be exercised through the prudent use of protective equipment and handling procedures to minimize exposure. Overexposure by inhalation or ingestion may cause dizziness, drowsiness, headache, nausea, vomiting, diarrhea, convulsions, central nervous system depression and loss of consciousness.

Eyes: Causes serious eye irritation.

Skin: May be harmful in contact with skin. Repeated or prolonged contact may cause irritation, dermatitis, defatting and drying or cracking of the skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Inhalation: Harmful if inhaled. Inhalation at high vapor concentrations may cause respiratory tract irritation and central nervous effects.

Ingestion: Harmful if swallowed. Ingestion may cause nausea, vomiting and diarrhea.

Acute toxicity information: Harmful if inhaled - Category 4. May be harmful in contact with skin - Category 5. Harmful if swallowed - Category 4.

Chemical Name	Inhalation LC50	Species	Oral LD50	Species	Dermal LD50	Species
Benzyl alcohol	>4178 mg/m3 (4 hours, aerosol)	Rat/ adult	1620 mg/kg	Rat/ adult male	N/E	N/E

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 (2A).

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). BENZYL ALCOHOL: This material has a low potential to cause allergic skin reactions, however cases of skin sensitization have been reported.

Chemical Name	Skin sensitisation	Species
Benzyl alcohol	Non-sensitizer	Weight of evidence

Carcinogenicity: Not classified (based on available data, the classification criteria are not met). BENZYL ALCOHOL: Under conditions of a two-year NTP gavage study, there was no evidence of carcinogenic activity for rats or mice receiving 200 or 400 mg/kg bw/day.

Germ cell mutagenicity: Not classified (based on available data, the classification criteria are not met). BENZYL ALCOHOL: Ames testing showed no mutagenic activity and mixed results both positive and negative were observed from other in-vitro genotoxicity assays. Benzyl alcohol showed no genotoxicity during in-vivo testing. The weight of the evidence indicates this material is not mutagenic or clastogenic.

Reproductive toxicity: Not classified (based on available data, the classification criteria are not met). BENZYL ALCOHOL - READ-ACROSS: Reproductive toxicity (benzoic acid), 4-generation oral study in rats: NOAEL (no-observed adverse-effect-level) of 500 mg/kg/day. Developmental toxicity (sodium benzoate), oral, rats and mice: NOAEL of >=175 mg/kg bw/day can be established for developmental effects. Benzyl alcohol - no effects on reproductive organs were observed in subchronic and long-term studies with rats and mice.

Specific target organ toxicity (STOT) - single exposure: Not classified (based on available data, the classification criteria are not met).

Specific target organ toxicity (STOT) - repeated exposure: Not classified (based on available data, the classification criteria are not met). BENZYL ALCOHOL: Long term animal studies indicate a gavage NOAEL (no-observed-adverse-effect-level) >=400 mg/kg/day for rats and >=200 mg/kg/day for mice. At higher doses, effects on bodyweights, brain lesions, thymus, skeletal muscle, kidneys, liver and central nervous system were observed. In a 4-week inhalation study in rats on Benzyl Alcohol, no adverse effects were observed with a no-observed-adverse-effect level (NOAEC) of 1072 mg/m3.

Aspiration hazard: Not classified (based on available data, the classification criteria are not met).

Other toxicity information: No additional information available.

SECTION 12: Ecological information

Ecotoxicity:

Chemical Name	Species	Acute	Acute	Chronic
Benzyl alcohol	Fish	LC50 460 mg/L (96 hours)	LC50 >100 mg/L(96 hours)	N/E
Benzyl alcohol	Invertebrates	EC50 230 mg/L (48 hours)	EC50 400 mg/L(24 hours)	NOEC 51 mg/L (21 days)
Benzyl alcohol	Algae	EC50 770 mg/L (72 hours)	N/E	NOEC 310 mg/L(72 hours)
Benzyl alcohol	Micro-organisms	EC50 390 mg/L (24 hours)		

Persistence and degradability:

Chemical Name	Biodegradation
Benzyl alcohol	Readily biodegradable (OECD 301C & 301A)

Bioaccumulative potential:

Chemical Name	Bioconcentration Factor (BCF)	Log Kow
Benzyl alcohol	1.37 L/kg (calculated)	1.05 @ 20°C

Mobility in soil:

Chemical Name	Mobility in soil (Koc/Kow)
Benzyl alcohol	15.7 (calculated)

Other adverse effects: No additional information available.

SECTION 13: Disposal considerations

Dispose of unused contents (incineration) in accordance with national and local regulations. Dispose of container in accordance with national and local regulations. Ensure the use of properly authorized waste management companies, where appropriate.

See Section 8 for recommendations on the use of personal protective equipment.

SECTION 14: Transport information

The information below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions.
UN number: N/A

UN proper shipping name:

Not regulated - See Bill of Lading for Details

Transport hazard class(es):

U.S. DOT hazard class: N/A
Canada TDG hazard class: N/A
Europe ADR/RID hazard class: N/A
IMDG Code (ocean) hazard class: N/A

ICAO/IATA (air) hazard class: N/A

A "N/A" listing for the hazard class indicates the product is not regulated for transport by that regulation.

Packing group: N/A

Environmental hazards:

Marine pollutant: Not Applicable
Hazardous substance (USA): Not Applicable

Special precautions for user: Not Applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:

Chemical Name	Category
Benzyl alcohol	Category Y

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question:

Japan regulations:

Japan Industrial Safety and Health Law:

Chemical name	Category
Benzyl alcohol	Notifiable substance, Harmful substance requiring name on label

Japan Fire Service Law:

Chemical name	Category
Benzyl alcohol	Group 4 - Flammable liquids

Japan Poisonous and Deleterious Substances:

Chemical name	Category	Threshold
No subject chemicals		

Japan Prevention of Marine Pollution and Disaster:

Chemical name	Category
Benzyl alcohol	Noxious Category Y

Japan Chemical Substances Control Law:

Chemical name	Category	Notes
No subject chemicals		

Other regulations: No Additional Information

Chemical inventories:

Regulation	Status
Australian Inventory of Industrial Chemicals (AIIC):	Y
Canadian Domestic Substances List (DSL):	Y
Canadian Non-Domestic Substances List (NDSL):	N
China Inventory of Existing Chemical Substances (IECSC):	Y
European EC Inventory (EINECS, ELINCS, NLP):	Y
Japan Existing and New Chemical Substances (ENCS):	Y
Japan Industrial Safety and Health Law (ISHL):	Y
Korean Existing and Evaluated Chemical Substances (KECL):	Y
New Zealand Inventory of Chemicals (NZIoC):	Y
Philippines Inventory of Chemicals and Chemical Substances (PICCS):	Y
Taiwan Inventory of Existing Chemicals:	Y
U.S. Toxic Substances Control Act (TSCA) (Active):	Y

A "Y" listing indicates all intentionally added components are either listed or are otherwise compliant with the regulation. A "N" listing indicates that for one or more components: 1) there is no listing on the public inventory (or is not on the ACTIVE inventory for U.S. TSCA); 2) no information is available; or 3) the component has not been reviewed. A "Y" for New Zealand may mean that a qualified group standard may exist for the components in this product.

Chemical inventory notes: New Zealand: One or more components may be covered by a group standard.

Europe REACH (EC) 1907/2006: Applicable components are registered, exempt or otherwise compliant. EU REACH is only relevant to substances either manufactured or imported into the EU. Emerald Kalama Chemical has met its obligations under the EU REACH regulation. EU REACH information regarding this product is provided for informational purposes only. Each Legal Entity may have differing EU REACH obligations, depending on their place in the supply chain. Emerald's compliance with EU REACH does not imply automatic coverage for Downstream Users located in the EU. For material manufactured outside of the EU, the importer of record must understand and meet their specific obligations under the regulation.

SECTION 16: Other information

Legend:
* : Trademark owned by Emerald Kalama Chemical, LLC.
ACGIH: American Conference of Governmental Industrial Hygienists
N/A: Not Applicable
N/E: None Established

STEL: Short Term Exposure Limit
TWA: Time Weighted Average (exposure for 8-hour workday)

Users Responsibility/Disclaimer of Liability:
The information set forth herein is based on our current knowledge, and is intended to describe the product solely with respect to health, safety and the environment. As such, it must not be interpreted as a guarantee of any specific property of the product. As a result, the customer shall be solely responsible for deciding whether said information is suitable and beneficial.

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