



BENZYL ALCOHOL
BATCH NUMBER 4521909

CAS#: 100-51-6

FEMA#: 2137

CERTIFICATE OF ANALYSIS

PRODUCT IDENTIFICATION

| | |
|-------------------|---------------------------------|
| PRODUCT NAME | BENZYL ALCOHOL - C |
| MOLECULAR FORM | C ₇ H ₈ O |
| MOLECULAR WT | 108.14 |
| MELTING POINT (C) | -5 deg C |
| BOILING POINT (C) | 205 deg C |
| FLASH POINT (F) | 212 deg F |
| BEST BEFORE DATE | October 2026 |

| PHYSICAL SPECIFICATIONS | RANGE | RESULTS |
|-------------------------|--|----------|
| APPEARANCE | CLEAR COLORLESS LIQUID | CONFORMS |
| ODOR | FAINT AROMATIC ODOR | CONFORMS |
| SPECIFIC GRAVITY (25C) | 1.0400 to 1.0500 | 1.0446 |
| REFRACTIVE INDEX (20C) | 1.5390 to 1.5410 | 1.5406 |
| SOLUBILITY | MISCIBLE IN ALCOHOL, 1 ML IN 30 ML WATER | CONFORMS |

| ANALYTICAL SPECIFICATIONS | RANGE | RESULTS |
|---------------------------|------------|---------|
| PURITY (BY GC) | 99.5 % MIN | 99.92% |

| OTHER SPECIFICATIONS | RANGE | RESULTS |
|-----------------------|-------------------------------------|----------|
| CLARITY OF SOLUTION | SOLUTION IS COLORLESS | CONFORMS |
| COLOR OF SOLUTION | SOLUTION IS COLORLESS | CONFORMS |
| IDENTIFICATION | CONFORMS TO STANDARD | |
| PEROXIDE VALUE | 5.0 MAXIMUM | |
| ACIDITY | 1.0 MAX (ML OF 0.10 N NAOH) | 0.01 |
| NON-VOLATILE RESIDUE | 0.05 % MAXIMUM | |
| ASSAY | 99.0 % MINIMUM | |
| ALDEHYDES | 0.2 % MAXIMUM | 0.022% |
| CHLORINATED COMPOUNDS | PASSES TEST | |
| DISTILLATION RANGE | > 95% BETWEEN 202.5 °C AND 206.5 °C | |

STABILITY

STABLE UNDER NORMAL CONDITIONS

STORAGE

STORE IN COOL DRY PLACE AWAY FROM HEAT AND SUNLIGHT.
SHELF LIFE CONSIDERATIONS APPLY ONLY FOR ORIGINAL UNOPENED CONTAINERS

FRAGRANCE ALLERGENS

Madar Corporation Limited hereby certifies that:

BENZYL ALCOHOL

Contains the following fragrance substances and natural extracts (essential oils) which are 'established contact allergens in humans' according to the Scientific Committee on Consumer Safety.

| | Allergen | CAS number | Content % |
|----|---------------------------------------|----------------------------------|-----------|
| 1 | Acetyl cedrene | 32388-55-9 | - |
| 2 | Amyl cinnamal | 122-40-7 | - |
| 3 | Amylcinnamyl alcohol | 101-85-9 | - |
| 4 | Amyl salicylate | 2050-08-0 | - |
| 5 | trans-Anethole | 4180-23-8 | - |
| 6 | Anisyl alcohol | 105-13-5 | - |
| 7 | Benzaldehyde | 100-52-7 | - |
| 8 | Benzyl alcohol | 100-51-6 | 100% |
| 9 | Benzyl benzoate | 120-51-4 | - |
| 10 | Benzyl cinnamate | 103-41-3 | - |
| 11 | Benzyl salicylate | 118-58-1 | - |
| 12 | Butylphenyl methylpropional (Lilial)* | 80-54-6 | - |
| 13 | Camphor | 76-22-2 464-49-3 | - |
| 14 | beta-Caryophyllene | 87-44-5 | - |
| 15 | Carvone | 99-49-0 / 6485-40-1 / 2244-16-8 | - |
| 16 | Cinnamal | 104-55-2 | - |
| 17 | Cinnamyl alcohol | 104-54-1 | - |
| 18 | Citral | 5392-40-5 | - |
| 19 | Citronellol | 106-22-9 / 1117-61-9 / 7540-51-4 | - |
| 20 | Coumarin | 91-64-5 | - |
| 21 | Damascenone (Rose ketone-4) | 23696-85-7 | - |
| 22 | alpha-Damascone | 43052-87-5 / 23726-94-5 | - |
| 23 | cis-beta-Damascone | 23726-92-3 | - |
| 24 | delta-Damascone | 57378-68-4 | - |
| 25 | Dimethyl benzyl carbonyl acetate | 151-05-3 | - |

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| | | | |
|----|--|---|---|
| 26 | <i>Eugenol</i> | 97-53-0 | - |
| 27 | <i>Farnesol</i> | 4602-84-0 | - |
| 28 | <i>Geraniol</i> | 106-24-1 | - |
| 29 | <i>Hexadecanolactone</i> | 109-29-5 | - |
| 30 | <i>Hexamethylindanopyran (Galaxolide)</i> | 1222-05-5 | - |
| 31 | <i>Hexyl cinnamal</i> | 101-86-0 | - |
| 32 | <i>Hydroxyisohexyl 3-cyclohexene carboxaldehyde (Lyrall)*</i> | 31906-04-4 / 51414-25-6 | - |
| 33 | <i>Hydroxycitronellal</i> | 107-75-5 | - |
| 34 | <i>Isoeugenol</i> | 97-54-1 | - |
| 35 | <i>alpha -Isomethylionone</i> | 127-51-5 | - |
| 36 | <i>(DL)-Limonene</i> | 5989-27-5 | - |
| 37 | <i>Linalool</i> | 78-70-6 | - |
| 38 | <i>Linalyl acetate</i> | 115-95-7 | - |
| 39 | <i>Menthol</i> | 1490-04-6 / 89-78-1 / 2216-51-5 | - |
| 40 | <i>6-Methyl coumarin</i> | 92-48-8 | - |
| 41 | <i>Methyl 2-octynoate</i> | 111-12-6 | - |
| 42 | <i>Methyl salicylate</i> | 119-36-8 | - |
| 43 | <i>3-Methyl-5-(2,2,3-trimethyl-3-cyclopentyl) pent-4-en-2-ol</i> | 67801-20-1 | - |
| 44 | <i>alpha-Pinene</i> | 80-56-8 | - |
| 44 | <i>beta-Pinene</i> | 127-91-3 | - |
| 45 | <i>Propylidene phthalide</i> | 17369-59-4 | - |
| 46 | <i>Salicylaldehyde</i> | 90-02-8 | - |
| 47 | <i>alpha-Santanol</i> | 115-71-9 | - |
| 47 | <i>beta-Santanol</i> | 77-42-9 | - |
| 48 | <i>Sclareol</i> | 515-03-7 | - |
| 49 | <i>Terpineol (Mixture of isomers)</i> | 8000-41-7 | - |
| 50 | <i>alpha-Terpineol</i> | 10482-56-1 / 98-55-5 | - |
| 51 | <i>Terpinolene</i> | 586-62-9 | - |
| 52 | <i>Tetramethyl acetyloctahydronaphthalenes</i> | 54464-57-2 / 54464-59-4 / 68155-66-8 / 68155-67-9 | - |
| 53 | <i>Trimethyl-benzenepropanol (Majantol)</i> | 103694-68-4 | - |
| 54 | <i>Vanillin</i> | 121-33-5 | - |
| 55 | <i>Cananga odorata (Ylang-ylang oil)</i> | 83863-30-3 / 8006-81-3 | - |
| 56 | <i>Cedrus atlantica bark oil</i> | 92201-55-3 / 8000-27-9 | - |
| 57 | <i>Cinnamomum cassia leaf oil</i> <i>Cinnamomum zeylanicum bark oil</i> | 8007-80-5 84649-98-9 | - |
| 58 | <i>Citrus autantium amara flower / peel oil</i> | 8016-38-4 / 72968-50-4 | - |
| 59 | <i>Citrus bergamia peel oil expressed</i> | 89957-91-5 | - |
| 60 | <i>Citrus limonum peel oil expressed</i> | 84929-31-7 | - |
| 61 | <i>Citrus sinensis peel oil expressed</i> | 97766-30-8 / 8028-48-6 | - |
| 62 | <i>Cymbopogon citratus, schoenanthus oils</i> | 89998-14-1 / 8007-02-1 / 89998-16-3 | - |
| 63 | <i>Eucalyptus spp. Leaf oil</i> | 92502-70-0 / 8000-48-4 | - |
| 64 | <i>Eugenia caryophyllus leaf / flower oil</i> | 8000-34-8 | - |

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| | | | |
|----|--|--|---|
| 65 | <i>Evernia furfuracea (Treemoss) extract</i> | 90028-67-4 | - |
| 66 | <i>Evernia prunastri (Oakmoss) extract</i> | 90028-68-5 | - |
| 67 | <i>Jasminum grandiflorum / officinale</i> | 84776-64-7 / 90045-94-6 / 8022-96-6 | - |
| 68 | <i>Juniperus virginiana</i> | 8000-27-9 / 85085-41-2 | - |
| 69 | <i>Laurus nobilis</i> | 8002-41-3 / 8007-48-5 / 84603-73-6 | - |
| 70 | <i>Lavandula hybrida</i> | 91722-69-9 | - |
| 71 | <i>Lavandula officinalis</i> | 84776-65-8 | - |
| 72 | <i>Mentha piperita</i> | 8006-90-4 / 84082-70-2 | - |
| 73 | <i>Mentha spicata</i> | 84696-51-5 | - |
| 74 | <i>Myroxylon pereirae</i> | 8007-00-9 | - |
| 75 | <i>Narcissu spp.</i> | Diverse | - |
| 76 | <i>Pelargonium graveolens</i> | 90082-51-2 / 8000-46-2 | - |
| 77 | <i>Pinus mugo / pumila</i> | 90082-72-7 / 97676-05-6 | - |
| 78 | <i>Pogostemon cablin</i> | 8014-09-3 / 84238-39-1 | - |
| 79 | <i>Rosa spp. (Rose)</i> | Diverse | - |
| 80 | <i>Santalum album</i> | 84787-70-2 / 8006-87-9 | - |
| 81 | <i>Turpentine oil</i> | 8006-64-2 / 9005-90-7 / 8052-14-0 | - |
| 82 | <i>Verbena absolute</i> | 8024-12-2 | - |

The information contained in this document is accurate to the best of our knowledge at the time given. This document is provided for internal use only. Tilley Distribution UK is not liable for any damages that may result from the misuse of data. Content values are given as an average of recently delivered batches. Absent means <1ppm or not detectable. *No longer permitted in cosmetics in the European Union and has been delisted from Annex III.

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CMR DECLARATION

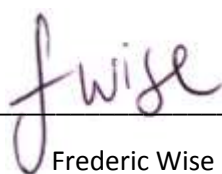
We hereby certifies that:

BENZYL ALCOHOL

contains the following components listed as carcinogenic, mutagenic or toxic for reproduction in Annex VI Part 3 of Regulation (EC) 1272/2008

| Substance | Content | Classification |
|-----------------------|---------|----------------|
| <i>none contained</i> | | |
| | | |

By:

A handwritten signature in purple ink that reads "fwise".

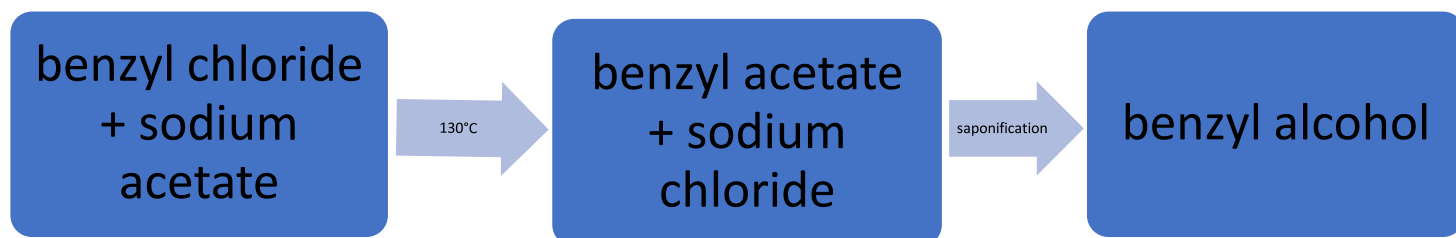
Frederic Wise

Regulatory Manager

Date of issue: 25/04/2023

PROCESS FLOW CHART

BENZYL ALCOHOL



We hereby certifies that the products has no added antioxidants, diluents, colorants or preservatives, nor are any solvents used in the extraction process.

Date of issue: 25/04/2023



GMO STATEMENT

We hereby certifies that:

BENZYL ALCOHOL

to the best of its knowledge does not derive from a genetically modified source (GMO) as specified in Regulation (EC) No 1829/2003 nor have GMO materials been used in its manufacture or as additives.

It requires no special labelling or traceability with regards to GMO as outlined in Regulation (EC) No 1830/2003.

It also adheres to the procedures outlined in Regulation (EU) 848/2018 article 11 (4) regarding organic production and is neither produced from or by GMOs.

Date of issue: 25/04/2023



IFRA CERTIFICATE

BENZYL ALCOHOL

We hereby certifies that the above material complies with the requirements of the INTERNATIONAL FRAGRANCE ASSOCIATION - IFRA-50th Amendment / published June 30th 2021 provided it is used in following applications (class) at a maximum concentration level of:

| IFRA category | Maximum level of use (%) |
|---------------|--------------------------|
| Class 1 | 0.45% |
| Class 2 | 0.14% |
| Class 3 | 0.34% |
| Class 4 | 2.50% |
| Class 5A | 0.64% |
| Class 5B | 0.17% |
| Class 5C | 0.34% |
| Class 5D | 0.06% |
| Class 6 | 1.50% |
| Class 7A | 0.68% |
| Class 7B | 0.68% |
| Class 8 | 0.06% |
| Class 9 | 2.20% |
| Class 10A | 2.20% |
| Class 10B | 8.50% |
| Class 11A | 0.06% |
| Class 11B | 0.06% |
| Class 12 | 100.00% |

The above values were calculated based on the following IFRA restricted materials: <benzyl alcohol - 100%>

Date of issue: 25/04/2023

It is the ultimate responsibility of our customer to ensure the safety of the final product by further testing if need be.
Evaluation of the Fragrance ingredient was made according to the safety requirements contained in the relevant section of the IFRA Code of Practice.

| IFRA category includes | IFRA category |
|---|---------------|
| Children's toys, Lip Products of all types (solid and liquid lipsticks, balms, clear or coloured etc...) (****) | Class 1 |
| Deodorant and Antiperspirant products of all types (spray, stick, roll-on, under-arm and body etc...), Body sprays (including body mist) | Class 2 |
| Eye products of all types (eye shadow, mascara, eyeliner, eye make-up, eye masks, eye pillows, etc.) including eye care and moisturizer; Facial make up and foundation; Make-up remover for face and eyes; Nose pore strips; Wipes or refreshing tissues for face, neck, hands, body; Body and face paint (for children and adults); Facial masks for face and around the eyes | Class 3 |
| Hydroalcoholic and non-hydroalcoholic fine fragrance of all types (Eau de Toilette, Parfum, Cologne, solid perfume, fragrancing cream, aftershaves of all types, etc.); Fragranced bracelets; Ingredients of perfume kits and fragrance mixtures for cosmetic kits; Scent pads, foil packs; Scent strips for hydroalcoholic products | Class 4 |
| Body creams, oils, lotions of all types; Foot care products (creams and powders); Insect repellent (intended to be applied to the skin); All powders and talc (excluding baby powders and talc) | Class 5A |
| Facial toner; Facial moisturizers and creams | Class 5B |
| Hand cream; Nail care products including cuticle creams, etc. | Class 5C |
| Baby cream/lotion, baby oil, baby powders and talc | Class 5D |
| Mouthwash, including breath sprays; Toothpaste; Toothpowder, strips, mouthwash tablets (****) | Class 6 |
| Hair permanent or other hair chemical treatments (rinse-off) (e.g. relaxers), including rinse-off hair dyes | Class 7A |
| Hair sprays of all types (pumps, aerosol sprays, etc.); Hair styling aids non sprays (mousse, gels, leave-on conditioners); Hair permanent or other hair chemical treatments (leave-on) (e.g. relaxers), including leave-on hair dyes; Shampoo - Dry (waterless shampoo); Hair deodorizer | Class 7B |
| Intimate wipes; Tampons; Baby wipes; Toilet paper (wet) | Class 8 |
| Bar Soap; Shampoo off all type; Cleanser for face (rinse off); Conditioner (rinse off); Liquid Soap; Body washes and shower gels of all types; Baby wash, bath, shampoo; Bath gels, foams, mousses, salts, oils and other products added to bathwater; Foot care products (feet are placed in a bath for soaking); Shaving creams of all types (stick, gels, foams, etc.); All depilatories (including facial) and waxes for mechanical hair removal; Shampoos for pets | Class 9 |
| Hand wash laundry detergent (including concentrates); Laundry pre-treatment of all types (e.g. paste, sprays, sticks); Hand dishwashing detergent (including concentrates); Hard surface cleaners of all types (bathroom and kitchen cleansers, furniture polish, etc.); Machine laundry detergents with skin contact (e.g. liquids, powders) including concentrates; Dry cleaning kits; Toilet seat wipes; Fabric softeners of all types including fabric softener sheets; Household cleaning products, other types including fabric cleaners, soft surface cleaners, carpet cleaners, furniture polishes sprays and wipes, leather cleaning wipes, stain removers, fabric enhancing sprays, treatment products for textiles (e.g. starch sprays, fabric treated with fragrances after wash, deodorizers for textiles or fabrics); Floor wax; Fragranced oil for lamp ring, reed diffusers, pot-pourri, liquid refills for air fresheners (non-cartridge systems), etc; Ironing water (Odorized distilled water) | Class 10A |
| Animal sprays – sprays applied to animals of all types; Air freshener sprays, manual, including aerosol and pump; Aerosol/spray insecticides | Class 10B |
| Feminine hygiene conventional pads, liners, interlabial pads; Diapers (baby and adult); Adult incontinence pant, pad; Toilet paper (dry); | Class 11A |
| Tights with moisturizers; Scented socks, gloves; Facial tissues (dry tissues); Napkins; Paper towels; Wheat bags; Facial masks (paper/protective) e.g. surgical masks not used as medical device; Fertilizers, solid (pellet or powder) | Class 11B |
| Candles of all types (including encased); Laundry detergents for machine wash with minimal skin contact (e.g. Liquid tabs, pods); Automated air fresheners and fragrancing of all types (concentrated aerosol with metered doses (range 0.05-0.5mL/spray), plug-ins, closed systems, solid substrate, membrane delivery, electrical, powders, fragrancing sachets, incense, liquid refills (cartridge), air freshening crystals); Air delivery systems; Cat Litter; Cell phone cases; Deodorizers/maskers not intended for skin contact (e.g. fabric drying machine deodorizers, carpet powders); Fuels; Insecticides (e.g. mosquito coil, paper, electrical, for clothing) excluding aerosols/sprays; Joss sticks or incense sticks; Dishwash detergent and deodorizers – for machine wash; Olfactive board games; Paints; Plastic articles (excluding toys); Scratch and sniff; Scent pack; Scent delivery system (using dry air technology); Shoe polishes; Rim blocks (Toilet) | Class 12 |

(****) Fragrance materials for use in these applications need also FEMA-GRAS conformity.

Date of issue: 25/04/2023



Safety Data Sheet

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Product name
BENZYL ALCOHOL - CHINESE

Issuing Date 25-Apr-2023

Revision date 25-Apr-2023

Version 4

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name BENZYL ALCOHOL - CHINESE

REACH registration number 01-2119492630-38-0010
EC No (EU Index No) 202-859-9

CAS No 100-51-6

Chemical Name Phenylmethanol

Synonyms Benzenemethanol

Pure substance/mixture Substance

Contains Benzyl alcohol

Formula C₇H₈O

Molecular weight 108.14

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Industry Use

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Supplier

Madar Corporation Limited
19 - 20 Sandleheath Industrial Estate
Fordingbridge
SP6 1PA
Tel: (+44) 1425 655 555
For further information, please contact

E-mail address technical@madarcorporation.co.uk

Non-Emergency Telephone Number +44 (0)1425 655 555

1.4. Emergency telephone number

Emergency telephone CHEMTREC

Emergency telephone - +1-703-741-5970**Europe** CCN# 17256**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture**

Regulation (EC) No 1272/2008

| | |
|--|---------------------|
| Acute toxicity - Oral | Category 4 - (H302) |
| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 - (H332) |

2.2. Label elements

Contains Benzyl alcohol

**Signal word**

Warning

Hazard statements

H302 - Harmful if swallowed

H332 - Harmful if inhaled

Precautionary Statements - EU (§28, 1272/2008)

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

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

P264 - Wash face, hands and any exposed skin thoroughly after handling

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

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P312 - Call a POISON CENTER or doctor/physician if you feel unwell

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Additional information

This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.1 Substances****Chemical nature** Alcohol.

| Chemical name | Weight-% | REACH registration number | EC No (EU Index No) | Classification according to | Specific concentration | M-Factor | M-Factor (long-term) |
|---------------|----------|---------------------------|---------------------|-----------------------------|------------------------|----------|----------------------|
|---------------|----------|---------------------------|---------------------|-----------------------------|------------------------|----------|----------------------|

| | | | | Regulation (EC) No. 1272/2008 [CLP] | limit (SCL) | | |
|----------------------------|----|-------------------|---|--|-------------|---|---|
| Benzyl alcohol 100-51-6 | NF | No data available | - | Eye Irrit. 2A (H319)(ECHA) Acute Tox. 5 (H313)(ECHA) Acute Tox. 4 (H302)(ECHA,CLP Annex VI.) Acute Tox. 4 (H332)(CLP Annex VI.) | - | - | - |

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

No information available

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---|---|
| General advice | Show this safety data sheet to the doctor in attendance. |
| Inhalation | Remove to fresh air. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists. |
| Skin contact | Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician. |
| Ingestion | Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician. |
| Self-protection of the first aider | Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8). |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|-----------------|---|
| Symptoms | May cause redness and tearing of the eyes. Burning sensation. |
|-----------------|---|

4.3. Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|------------------------|
| Note to physicians | Treat symptomatically. |
|---------------------------|------------------------|

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|-------------------------------------|---|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
|-------------------------------------|---|

| | |
|-------------------|--|
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
|-------------------|--|

| | |
|---------------------------------------|---|
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
|---------------------------------------|---|

5.2. Special hazards arising from the substance or mixture

| | |
|---|--|
| Specific hazards arising from the chemical | No information available. |
| Hazardous combustion products | Irritating or toxic substances may be emitted upon burning, combustion, or decomposition. |
| <u>5.3. Advice for firefighters</u> | |
| Special protective equipment and precautions for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|---------------------------------|---|
| Personal precautions | Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. |
| Other information | Refer to protective measures listed in Sections 7 and 8. |
| For emergency responders | Use personal protection recommended in Section 8. |

6.2. Environmental precautions

| | |
|----------------------------------|---|
| Environmental precautions | See Section 12 for additional Ecological Information. |
|----------------------------------|---|

6.3. Methods and material for containment and cleaning up

| | |
|--|--|
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Take up mechanically, placing in appropriate containers for disposal. |
| Prevention of secondary hazards | Clean contaminated objects and areas thoroughly observing environmental regulations. |

6.4. Reference to other sections

| | |
|------------------------------------|--|
| Reference to other sections | See section 8 for more information. See section 13 for more information. |
|------------------------------------|--|

SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | |
|---------------------------------------|---|
| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. |
| General hygiene considerations | Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|---------------------------|---|
| Storage Conditions | Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. |
|---------------------------|---|

7.3. Specific end use(s)

| | |
|--------------------------------------|--|
| Risk Management Methods (RMM) | The information required is contained in this Safety Data Sheet. |
|--------------------------------------|--|

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| | |
|---|---|
| Exposure Limits | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
| Biological occupational exposure limits | This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies. |
| Derived No Effect Level (DNEL) | Workers. |
| oral | Long Term: 4 mg/kg bw/day, Short Term: 20 mg/kg bw/day |
| dermal | Long Term: 8 mg/kg bw/day, Short Term: 40 mg/kg bw/day |
| Inhalation | Long Term: 22 mg/m ³ , Short Term: 110 mg/m ³ |
| Derived No Effect Level (DNEL) | General Population. |
| dermal | Long Term: 4 mg/kg bw/day, Short Term: 20 mg/kg bw/day |
| Inhalation | Long Term: 5.4 mg/m ³ , Short Term: 27 mg/m ³ |
| Predicted No Effect Concentration (PNEC) | |
| Fresh Water | 1 mg/L |
| Sea Water | 0.1 mg/L |
| Sea sediment | 0.527 mg/kg sediment dw |
| Soil | 0.456 mg/kg soil dw |
| Impact on Sewage Treatment | 39 mg/L |

8.2. Exposure controls

| | |
|--|--|
| Engineering controls | No information available. |
| Personal Protective Equipment | |
| Eye/face protection | If splashes are likely to occur, wear safety glasses with side-shields. |
| Hand protection | Wear suitable gloves. |
| Skin and body protection | Wear suitable protective clothing. |
| Respiratory protection | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| General hygiene considerations | Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. |
| Environmental exposure controls | No information available. |

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | |
|-----------------------|-------------------------------|
| Physical state | Liquid |
| Appearance | Clear |
| Color | Colorless to almost colorless |
| Odor | Characteristic odor. |
| Odor threshold | No information available |

| Property | Values | Remarks • Method |
|---------------------------------------|-------------------|-------------------------|
| Melting point / freezing point | -16 °C | |
| Boiling point / boiling range | 205 °C | |
| Flammability (solid, gas) | No data available | None known |

| | | |
|----------------------------------|--------------------------|-----------------|
| Flammability Limit in Air | | None known |
| Upper flammability limit: | No data available | |
| Lower flammability limit: | No data available | |
| Flash Point | 100 °C | CC (closed cup) |
| Autoignition Temperature | 436 °C | |
| Decomposition temperature | | None known |
| pH | No data available | None known |
| pH (as aqueous solution) | No data available | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | 5.84 mPa s | (20°C) |
| Water solubility | No data available | (25°C) |
| solubility(ies) | No data available | None known |
| Partition coefficient | LogKow - 1.05 | (20°C) |
| Vapor pressure | 0.007kPa | (20°C) |
| Relative density | 1.042 - 1.047 | (25°C) |
| Bulk Density | No data available | |
| Density | No data available | |
| Vapor Density | No data available | None known |
| Particle characteristics | | |
| Particle Size | No information available | |
| Particle Size Distribution | No information available | |

9.2. Other information

Molecular weight 108.14

9.2.1. Information with regard to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
No information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

 Sensitivity to mechanical impact None.

 Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous Decomposition Products None known based on information supplied.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Information on likely routes of exposure****Product Information**

| | |
|---------------------|--|
| Inhalation | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. |
| Eye contact | Specific test data for the substance or mixture is not available. |
| Skin contact | Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation. |
| Ingestion | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components). |

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause redness and tearing of the eyes.

Acute toxicity**Numerical measures of toxicity****Component Information**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|----------------|--|--------------------------|-----------------|
| Benzyl alcohol | 1 Mouse 1150 mg/kg 4 (not assignable) 2 Mouse 1580 mg/kg Female, Male 4 (not assignable) 3 Rabbit; Rat 1040 mg/kg 4 (not assignable) 4 Rabbit; Rat 2080 mg/kg 4 (not assignable) 5 Rat 1230 mg/kg Female, Male 4 (not assignable) 6 Rat 1570 mg/kg Female, Male 2 (reliable with restrictions) 7 +/- Rat 1620 mg/kg Male 2 (reliable with restrictions) 8 Rat 3100 mg/kg 4 (not assignable) | >4,178 mg/m ³ | >2,000 mg/kg bw |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity The environmental impact of this product has not been fully investigated.

12.2. Persistence and degradability

Persistence and degradability Readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulation

Bioconcentration factor (BCF) 1.37 L/kg ww

Component Information

| Chemical name | Partition coefficient |
|----------------|-----------------------|
| Benzyl alcohol | 1.10 |

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6. Other adverse effects

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number Not regulated
14.2 UN proper shipping name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Environmental hazard Not applicable
14.6 Special precautions for user
Special Provisions None

IMDG

14.1 UN number or ID number Not regulated
14.2 UN proper shipping name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Environmental hazard Not applicable
14.6 Special precautions for user
Special Provisions None
14.7 Maritime transport in bulk according to IMO instruments No information available

RID

14.1 UN/ID no Not regulated
14.2 UN proper shipping name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Environmental hazard Not applicable
14.6 Special precautions for user
Special Provisions None

ADR

14.1 UN number or ID number Not regulated
14.2 UN proper shipping name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Environmental hazard Not applicable
14.6 Special precautions for user
Special Provisions None

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**National regulations****Germany****European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories

| | |
|----------------------|--|
| TSCA | Contact supplier for inventory compliance status |
| DSL/NDL | Contact supplier for inventory compliance status |
| EINECS/ELINCS | Contact supplier for inventory compliance status |
| ENCS | Contact supplier for inventory compliance status |
| IECSC | Contact supplier for inventory compliance status |
| KECL | Contact supplier for inventory compliance status |
| PICCS | Contact supplier for inventory compliance status |
| AICS | Contact supplier for inventory compliance status |
| NZIoC | Contact supplier for inventory compliance status |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet**

Full text of H-Statements referred to under section 3

H302 - Harmful if swallowed

H313 - May be harmful in contact with skin

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

Legend

SVHCL

LEG8 SECTION 8: Exposure controls/personal protection

TWA TWA (time-weighted average)

STEL

STEL (Short Term Exposure Limit)

Ceiling Maximum limit value

*

Skin designation

+ Sensitizers

| Classification procedure | |
|---|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
| Acute oral toxicity | Calculation method |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - vapor | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | Calculation method |
| Serious eye damage/eye irritation | Calculation method |
| Respiratory sensitization | Calculation method |
| Skin sensitization | Calculation method |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - single exposure | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |
| Ozone | Calculation method |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (ECHA_API)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Issuing Date

12-Feb-2019

Revision date

25-Apr-2023

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

This material has not been tested or proven safe for inhalation. With this document, we only attest to the safety of the product when used in the appropriate and suitable fragrance/flavor industry application.

Classification and labeling according to the IFRA/IOFI Labeling Manual 2022.

End of Safety Data Sheet

PRODUCT SPECIFICATION
PRODUCT IDENTIFICATION

| | |
|-------------------|--------------------------|
| PRODUCT NAME | BENZYL ALCOHOL - CHINESE |
| MOLECULAR FORM | C7H8O |
| MOLECULAR WT | 108.14 |
| MELTING POINT (C) | -5 deg C |
| BOILING POINT (C) | 205 deg C |
| FLASH POINT (F) | 212 deg F |
| SHELF LIFE (DAYS) | 730 |

| PHYSICAL SPECIFICATIONS | RANGE | METHOD |
|-------------------------|--|--------------|
| APPEARANCE | CLEAR COLORLESS TO PALE YELLOW LIQUID | VISUAL |
| ODOR | FAINT AROMATIC ODOR | ORGANOLEPTIC |
| SPECIFIC GRAVITY (25C) | 1.0420 to 1.0470 | FCC METHOD |
| REFRACTIVE INDEX (20C) | 1.5390 to 1.5410 | FCC METHOD |
| SOLUBILITY | MISCIBLE IN ALCOHOL, 1 ML IN 30 ML WATER | FCC METHOD |

| ANALYTICAL SPECIFICATIONS | RANGE | METHOD |
|---------------------------|------------|-----------|
| PURITY (BY GC) | 99.5 % MIN | CHEM_20.M |

| OTHER SPECIFICATIONS | RANGE | METHOD |
|-----------------------|-------------------------------------|---------------|
| CLARITY OF SOLUTION | SOLUTION IS COLORLESS | NF METHOD |
| COLOR OF SOLUTION | SOLUTION IS COLORLESS | NF METHOD |
| IDENTIFICATION | CONFORMS TO STANDARD | NF/FCC METHOD |
| PEROXIDE VALUE | 5.0 MAXIMUM | NF METHOD |
| ACIDITY | 1.0 MAX (ML OF 0.10 N NAOH) | NF METHOD |
| NON-VOLATILE RESIDUE | 0.05 % MAXIMUM | NF METHOD |
| ASSAY | 99.0 % MINIMUM | FCC METHOD |
| ALDEHYDES | 0.2 % MAXIMUM | FCC METHOD |
| CHLORINATED COMPOUNDS | PASSES TEST | FCC METHOD |
| DISTILLATION RANGE | > 95% BETWEEN 202.5 °C AND 206.5 °C | FCC METHOD |

STABILITY

STABLE UNDER NORMAL CONDITIONS

STORAGE

STORE IN COOL DRY PLACE AWAY FROM HEAT AND SUNLIGHT.
SHELF LIFE CONSIDERATIONS APPLY ONLY FOR ORIGINAL UNOPENED CONTAINERS

COMMENTS

DATING FORMAT FOR U.S. IS MM/DD/YYYY.

C of A IS ELECTRONICALLY GENERATED AND IS VALID UNSIGNED.



DIETS DECLARATION

We Ltd hereby certifies that:

BENZYL ALCOHOL

To the best of our knowledge is suitable for:

| | Yes | No |
|-----------------------|-------------------|----|
| Ovo-lacto Vegetarians | ✓ | |
| Vegetarians | ✓ | |
| Vegans | ✓ | |
| Coeliacs | ✓ | |
| Kosher | ✓ | |
| Halal | ✓ (Not certified) | |

Date of issue: 25/04/2023