

**CERTIFICATE OF ANALYSIS**

**PRODUCT IDENTIFICATION**

PRODUCT NAME	BENZYL BENZOATE -C
MOLECULAR FORM	C14H12O2
MOLECULAR WT	212.24
MELTING POINT (C)	70 deg C
BOILING POINT (C)	323 deg C
FLASH POINT (F)	298 deg F
BEST BEFORE DATE	JUNE 2022

PHYSICAL SPECIFICATIONS	RANGE	RESULTS
APPEARANCE	COLORLESS OILY LIQUID	CONFORMS
ODOR	SLIGHT AROMATIC ODOR	CONFORMS
SPECIFIC GRAVITY (25C)	1.1160 to 1.1200	1.1184
REFRACTIVE INDEX (20C)	1.5680 to 1.5700	1.5694
SOLUBILITY	MISCIBLE IN ALCOHOL; INSOLUBLE IN GLYCERINE, WATER	

ANALYTICAL SPECIFICATIONS	RANGE	RESULTS
PURITY (BY GC)	99.0% MIN	99.93%

OTHER SPECIFICATIONS	RANGE	RESULTS
ACID VALUE	1.0 MAX	0.05
SOLIDIFICATION PT, DEG C	>= 18°C	18 C
CHLORINATED COMPOUNDS**	NEGATIVE	NEGATIVE

**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

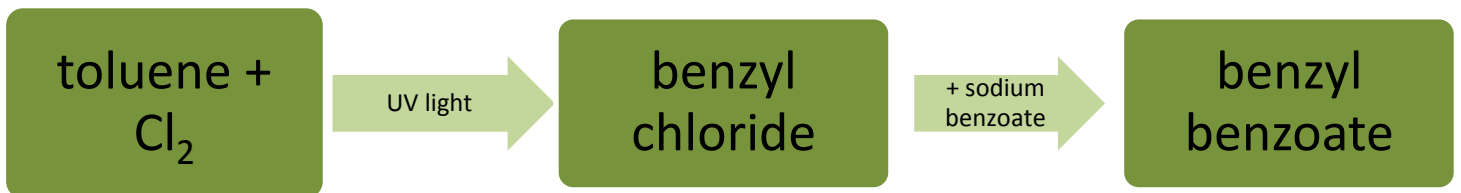
### BENZYL BENZOATE

Contains the following fragrance allergens as detailed in the 7th Amendment to the EU Cosmetic Directive 76/768/EEC:

	Allergen	CAS number	Content %
1	Alpha isomethylionone	127-51-5	-
2	Amyl cinnamal	122-40-7	-
3	Amylcinnamyl alcohol	101-85-9	-
4	Anisyl alcohol	105-13-5	-
5	Benzyl alcohol	100-51-6	0.1% max
6	Benzyl benzoate	120-51-4	99% min
7	Benzyl cinnamate	103-41-3	-
8	Benzyl salicylate	118-58-1	-
9	Butylphenyl methylpropional (Lilial)	80-54-6	-
10	Cinnamal	104-55-2	-
11	Cinnamyl alcohol	104-54-1	-
12	Citral	5392-40-5	-
13	Citronellol	106-22-9	-
14	Coumarin	91-64-5	-
15	Eugenol	97-53-0	-
16	Farnesol	4602-84-0	-
17	Geraniol	106-24-1	-
18	Hexyl cinnamal	101-86-0	-
19	Hydroxycitronellal	107-75-5	-
20	Hydroxyisohexyl 3-cyclohexene carboxaldehyde (Lyral)	31906-04-4	-
21	Isoeugenol	97-54-1	-
22	Limonene	5989-27-5	-
23	Linalool	78-70-6	-
24	Methyl 2-octynoate	111-12-6	-
25	Evernia furfuracea (Treemoss) extract	90028-67-4	-
26	Evernia prunastri (Oakmoss) extract	90028-68-55	-

**PROCESS FLOW CHART**

**BENZYL BENZOATE**



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



## **GMO CERTIFICATE**

### **BENZYL BENZOATE**

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.

## IFRA CERTIFICATE

### BENZYL BENZOATE

Madar Corporation Limited hereby certifies that the above material complies with the requirements of the INTERNATIONAL FRAGRANCE ASSOCIATION - IFRA-48th Amendment / published June 10th 2015) provided it is used in following application (class) at a maximum concentration level of:

IFRA category	Maximum level of use (%)
Class 1	1.7%
Class 2	2.2%
Class 3A	8.9%
Class 3B	8.9%
Class 3C	8.9%
Class 3D	8.9%
Class 4A	26.7%
Class 4B	8.9%
Class 4C	8.9%
Class 4D	8.9%
Class 5	14.0%
Class 6	42.8%
Class 7A	4.5%
Class 7B	4.5%
Class 8A	2.0%
Class 8B	2.0%
Class 9A	5.0%
Class 9B	5.0%
Class 9C	5.0%
Class 10A	2.5%
Class 10B	2.5%
Class 11	Not restricted

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

The IFRA Standards regarding use restrictions are based on safety assessments by the Panel of Experts of the RESEARCH INSTITUTE FOR FRAGRANCE MATERIALS (RIFM) and are enforced by the IFRA Scientific Committee.

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
Toys (****)	Class 1A
Insect Repellent intended to be applied on the skin	Class 1B
Lip Products of all types (solid and liquid lipsticks, balms, clear or coloured etc...)(****)	Class 2
Deodorant and Antiperspirant products of all types (spray, stick, roll-on, under-arm and body etc...)	Class 3A
Hydroalcoholic products applied to recently shaved skin (EdT range)	Class 3B
Hydroalcoholic products applied to recently shaved skin (fine fragrance range)	Class 3C
Eye Products of all types (eye shadow, mascara, eyeliner, eye make-up, etc...)	Class 3D
Men's Facial Creams, Balms, Wipes, Refreshing Tissues	Class 4A
Tampons	Class 4B
Hydroalcoholic Products applied to unshaved skin (EdT range)	Class 4C
Ingredients of Perfume Kits, Scent Strips for Hydroalcoholic Products, "scratch and sniff", other paper products	Class 4D
Hydroalcoholic Products applied to unshaved skin, Fine Fragrance range	Class 5A
Hair Styling Aids Sprays of all types (pumps, aerosol sprays, etc...). Hair Deodorant	Class 6
Body Creams, Oils, Lotions of all types (including baby creams, lotions, oils)	Class 7
Fragrance Compounds for Cosmetic Kits, Foot Care Products	Class 8
Fragrancing Creams of all types	Class 9A
Women's Facial Creams/Facial Make-up/Facial Wipes. Facial Masks, Hand Cream	Class 9B
Mouthwash, Toothpaste (****)	Class 9C
Intimate Wipes, Baby Wipes	Class 10A
Make-up Removers of all types (not including face cleansers)	Class 10B
Hair Styling Aids Non-Spray of all types (mousse, gels, leave-in conditioners etc...)	Class 10B
Nail Care, all Powders & Talcs (including baby powders and talcs)	Class 10B
Liquid Soap, Bar Soap (toilet soap), Depilatory,	Class 11A
Conditioner (rinse-off), Shampoos of all types (including baby shampoos)	Class 11A
Face Cleansers of all types (washes, gels, scrubs, etc...) Shaving Creams of all types (stick, gels, foams, etc...)	Class 11A
Body Washes of all types (including baby washes) and Shower Gels of all types	Class 11A
Bath Gels, Foams, Mousses, Salts, Oils and other products added to bathwater	Class 11A
Feminine pads/Liners	Class 11A
Aerosols (including air fresheners sprays but not including deodorant/antiperspirants, hair styling aids spray)	Class 11A
Hand wash/Machine Wash Laundry Detergents of all types (liquid, powder, tablet, etc...) including Laundry Bleaches	Class 11A
Other Household Cleaning Products (fabric cleaners, soft surface cleaners, carpet cleaners etc...), Dry Cleaning Kits	Class 11A
Fabric Softeners of all types including softener sheets. Hand Dishwashing Detergent.	Class 11A
Hard Surface Cleaners of all types (bathroom and kitchen cleansers, furniture polish etc...), Shampoos for pets	Class 11A
Diapers	Class 11A
All non-skin contact, including:	Class 11A
Air Fresheners and fragrancing of all types (excluding aerosol products): plug-ins, solid substrate, membrane delivery; Toilet blocks; Joss Sticks, Incense; Insecticides (mosquito coil, paper, electrical, etc...excluding aerosols); Plastic articles (excluding toys); Candles; Fuels; Paints.	Class 11A
All incidental skin contact, including:	Class 11B
Machine Dish wash Detergents and Deodorizers. Machine only Laundry Detergents (e.g. liquid tabs)	Class 11B
Deodorizers/Maskers (e.g. fabric drying machine deodorizers, carpet powder)	Class 11B
Pot pourri, fragrancing sachets, liquid refills for air fresheners, etc...	Class 11B
Shoe polishes; Cat Litter; Animal Sprays (excluding aerosols); Treated Textiles; Odoured Distilled Water	Class 11B

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

Date of issue: 11/11/2016

This safety data sheet complies with the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

**Product name** BENZYL BENZOATE

**Issue date** 26-Mar-2015

**Revision date** 28-Jan-2019

**Version** 5

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

### 1.1. Product Identifier

<b>Product code</b>	BEN0021
<b>Product name</b>	BENZYL BENZOATE
<b>REACH registration number</b>	01-2119976371-33-0002
<b>EC No.</b>	204-402-9
<b>CAS No</b>	120-51-4
<b>Synonyms</b>	Benzoic acid ester
<b>Pure substance/mixture</b>	Substance
Contains Benzyl benzoate	
<b>Formula</b>	C14H12O2
<b>Molecular weight</b>	212.25

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

<b>Sold to the general public?</b>	No
<b>Recommended Use</b>	Industry Use
<b>Uses advised against</b>	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 655555

For further information, please contact

<b>Contact Point</b>	technical@madarcorporation.co.uk
<b>E-mail address</b>	

### 1.4. Emergency telephone number

Emergency telephone	CHEMTREC
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<b>Emergency telephone - +1-703-741-5970</b>
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<b>Europe</b>	<b>CCN# 17256</b>
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## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Regulation (EC) No 1272/2008**

Acute toxicity - Oral	Category 4 - (H302)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 2 - (H411)

**2.2. Label Elements****Product identifier**

Contains Benzyl benzoate

**Signal word**

Warning

**Hazard statements**

H302 - Harmful if swallowed

H400 - Very toxic to aquatic life

H411 - Toxic to aquatic life with long lasting effects

**Precautionary Statements**

P102 - Keep out of reach of children

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

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

P273 - Avoid release to the environment

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

**2.3. Other Hazards**

H313 - May be harmful in contact with skin

## SECTION 3: Composition/information on ingredients

**3.1 Substances****Chemical nature**

Aromatic ester.

Chemical Name	EC No.	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Benzyl benzoate	Present	120-51-4	>99	Acute Tox. 4 (H302)(EFFA) Aquatic Acute 1 (H400) (EFFA) Aquatic Chronic 2 (H411) (EFFA) Acute Tox. 5 (H313)(EFFA)	No data available
Dibenzyl ether - indirect synthetic impurity	Present	103-50-4	0.01 - <0.1	Aquatic Acute 1 (H400) (EFFA) Skin Sens. 1 (H317) (EFFA) Skin Irrit. 3 (316) (EFFA) Aquatic Chronic 1 (H410) (EFFA) Acute Tox. 5 (H303)(EFFA)	No data available
Benzyl alcohol - indirect synthetic impurity	Present	100-51-6	0.01 - <0.1	Acute Tox. 4 (H302) Eye Irrit. 2 (H319)	No data available



				(ECHA) Acute Tox. 5 (H313)(ECHA)	
Diphenylmethane - indirect synthetic impurity	Present	101-81-5	0.01 - <0.1	Aquatic Acute 1 (H400) (ECHA) Aquatic Chronic 1 (H410) (ECHA) Acute Tox. 5 (H303)(ECHA)	No data available
Benzaldehyde - indirect synthetic impurity	Present	100-52-7	0.01 - <0.1	Aquatic Acute 2 (H401) (ECHA) Eye Irrit. 2 (H319) (ECHA) Skin Irrit. 3 (H316) (ECHA) Acute Tox. 4 (H302) (ECHA) Flam. Liq. 4 (H227)(ECHA) Acute Tox. 4 (H332)(ECHA) STOT-SE 3 (H335) (ECHA)	No data available

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>Inhalation</b>	Move to fresh air in case of accidental inhalation of vapors. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
<b>Skin contact</b>	Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of water. Wash contaminated clothing before reuse. Consult a physician if necessary.
<b>Eye Contact</b>	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. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	Do not induce vomiting without medical advice. Clean mouth with water. Never give anything by mouth to an unconscious person. Get medical attention.

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

<b>Symptoms</b>	None known.
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### 4.3. Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically.
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

Dry chemical, CO<sub>2</sub>, alcohol-resistant foam or water spray

#### **Unsuitable extinguishing media**

Do not use a solid water stream as it may scatter and spread fire

### 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors

**Hazardous combustion products** Irritating or toxic substances may be emitted upon burning, combustion, or decomposition.

### **5.3. Advice for firefighters**

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

#### **Personal precautions**

Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. Stop leak if you can do it without risk.

#### **For emergency responders**

Use personal protection recommended in Section 8.

### **6.2. Environmental precautions**

Collect spillage.

### **6.3. Methods and material for containment and cleaning up**

#### **Methods for Containment**

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

#### **Methods for cleaning up**

Cover liquid spill with sand, earth or other non-combustible absorbent material. Use personal protective equipment as required. Dam up. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

### **6.4. Reference to other sections**

See Section 12: ECOLOGICAL INFORMATION.

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

#### **Advice on safe handling**

Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Ensure adequate ventilation, especially in confined areas.

#### **General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands thoroughly after handling.

### **7.2. Conditions for safe storage, including any incompatibilities**

#### **Storage Conditions**

Protect from direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place.

### **7.3. Specific end use(s)**

#### **Risk Management Methods (RMM)**

The information required is contained in this Material Safety Data Sheet.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Benzyl alcohol - indirect synthetic impurity 100-51-6	-	-	-	-	TWA: 22 mg/m <sup>3</sup> TWA: 5 ppm Ceiling / Peak: 44 mg/m <sup>3</sup> Ceiling / Peak: 10 ppm Skin
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Benzyl alcohol - indirect synthetic impurity 100-51-6	-	-	-	TWA: 10 ppm TWA: 45 mg/m <sup>3</sup>	-
Benzaldehyde - indirect synthetic impurity 100-52-7	-	-	-	TWA: 1 ppm TWA: 4.4 mg/m <sup>3</sup> Ceiling: 4 ppm Ceiling: 17.4 mg/m <sup>3</sup>	-
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Benzyl alcohol - indirect synthetic impurity 100-51-6	-	Skin TWA: 5 ppm TWA: 22 mg/m <sup>3</sup>	TWA: 240 mg/m <sup>3</sup>	-	-
Benzaldehyde - indirect synthetic impurity 100-52-7	-	-	STEL: 40 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>	-	-

#### Derived No Effect Level (DNEL)

#### Workers

**dermal** Long Term: 2.6 mg/kg bw/day

**Inhalation** Short Term: 102 mg/m<sup>3</sup>; Long Term: 5.1 mg/m<sup>3</sup>

#### Derived No Effect Level (DNEL)

#### General Population

**oral** Short Term: 78 mg/kg bw/day; Long Term: 0.4 mg/kg bw/day

**dermal** Long Term: 1.3 mg/kg bw/day

**Inhalation** Short Term: 25 mg/m<sup>3</sup>; Long Term: 1.25 mg/m<sup>3</sup>

#### Predicted No Effect Concentration (PNEC)

**Fresh Water** 0.017 mg/L

**Sea Water** 0.002 mg/L

**Sea sediment** 1.07 mg/kg sediment dw

**Soil** 2.12 mg/kg soil dw

**Impact on Sewage Treatment** 100 mg/L

### 8.2. Exposure controls

#### Engineering controls

Showers  
Eyewash stations  
Ventilation systems

Ensure adequate ventilation, especially in confined areas

**Personal Protective Equipment**

<b>Eye/Face Protection</b>	Avoid contact with eyes. Wear safety glasses with side shields (or goggles).
<b>Hand protection</b>	Wear protective nitrile rubber gloves.
<b>Skin and Body Protection</b>	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
<b>Respiratory protection</b>	Ensure adequate ventilation, especially in confined areas.

**Environmental exposure controls** Prevent product from entering drains.

## SECTION 9: Physical and chemical properties

**9.1. Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid	<b>Odor</b>	Characteristic Odor
<b>Appearance</b>	Clear Viscous	<b>Odor threshold</b>	Not applicable
<b>Color</b>	Colorless to almost colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>		
<b>Melting point / freezing point</b>	18-21 °C / 64-70 °F	
<b>Boiling point / boiling range</b>	323 °C / 614 °F	
<b>Flash Point</b>	148 °C / 298 °F	
<b>Evaporation Rate</b>	<1	
<b>Flammability (solid, gas)</b>		
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>		
<b>Lower flammability limit:</b>		
<b>Vapor pressure</b>	0.0000305kPa	(25°C)
<b>Vapor Density</b>	7.3 (Air = 1)	
<b>Specific gravity</b>	1.116 - 1.200	(25°C)
<b>Water solubility</b>	14.1 < 15.9 mg/L	(20°C)
<b>solubility(ies)</b>		
<b>Partition coefficient</b>	logPow - 3.97	n-octanol/water (25°C)
<b>Autoignition Temperature</b>	480 °C / 896 °F	
<b>Decomposition temperature</b>		
<b>Kinematic viscosity</b>		
<b>Dynamic viscosity</b>	6.53251 mPa s	(30°C)
<b>Explosive properties</b>	Not an explosive	
<b>Oxidizing properties</b>	Not oxidising	

**9.2. Other information**

<b>Molecular weight</b>	212.25
<b>VOC content (%)</b>	100
<b>Density</b>	Not applicable
<b>Bulk Density</b>	Not applicable

## SECTION 10: Stability and reactivity

**10.1. Reactivity****10.2. Chemical stability**

Stable under recommended storage 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**

Extremes of temperature and direct sunlight. Keep out of reach of children.

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

None under normal use conditions.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity****Product Information**

Harmful if inhaled.

<b>Inhalation</b>	Avoid breathing vapors or mists.
<b>Eye Contact</b>	Avoid contact with eyes.
<b>Skin contact</b>	Avoid contact with skin. May be harmful in contact with skin.
<b>Ingestion</b>	Harmful if swallowed.

The following values are calculated based on chapter 3.1 of the GHS document

**Unknown acute toxicity**

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

<b>Oral LD50</b>	> 2,000 mg/kg
<b>Dermal LD50</b>	> 2,000 mg/kg

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Benzyl benzoate	>2,000 mg/kg ( Rat )	4000 mg/kg ( Rabbit )	>5.57 mg/L (similar materials, 4 hours, Rat)
Dibenzyl ether - indirect synthetic impurity	= 2500 mg/kg ( Rat )		
Benzyl alcohol - indirect synthetic impurity	= 1230 mg/kg ( Rat )	= 2 g/kg ( Rabbit )	= 8.8 mg/L ( Rat ) 4 h
Diphenylmethane - indirect synthetic impurity	= 2250 mg/kg ( Rat )	> 5 g/kg ( Rabbit )	
Benzaldehyde - indirect synthetic impurity	= 1292 mg/kg ( Rat )	> 1250 mg/kg ( Rabbit )	

**Skin corrosion/irritation** Not expected to cause skin irritation.**Serious eye damage/eye irritation** Not classified.**Sensitization** Not expected to cause skin sensitization.**Germ cell mutagenicity** Not classified.**Carcinogenicity** Not classified.

<b>Reproductive toxicity</b>	This product does not contain any known or suspected reproductive hazards above the threshold value.
<b>STOT - single exposure</b>	Not classified.
<b>STOT - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.

## SECTION 12: Ecological information

### 12.1. Toxicity

Very toxic to aquatic life

Toxic to aquatic life with long lasting effects

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Crustacea	Algae/aquatic plants	Fish
Benzyl benzoate	48 hr EC50 - 3.09 mg/L, Chronic NOEC - 1.73 mg/L (Daphnia magna)	72hr EC50 - 0.475 mg/L; NOEC - 0.247 mg/L (Pseudokirchneriella subcapitata)	96 hr LC50 - 2.32 mg/l (Brachydanio rerio)
Benzyl alcohol - indirect synthetic impurity	23: 48 h water flea mg/L EC50		10: 96 h Lepomis macrochirus mg/L LC50 static 460: 96 h Pimephales promelas mg/L LC50 static
Benzaldehyde - indirect synthetic impurity	50: 24 h Daphnia magna mg/L EC50		7.5: 96 h Lepomis macrochirus mg/L LC50 static 6.8 - 8.53: 96 h Pimephales promelas mg/L LC50 flow-through 0.8 - 1.44: 96 h Lepomis macrochirus mg/L LC50 flow-through 10.6 - 11.8: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 12.69: 96 h Oncorhynchus mykiss mg/L LC50 static

### 12.2. Persistence and degradability

Readily biodegradable.

### 12.3. Bioaccumulative potential

Low potential for bioaccumulation.

**Bioconcentration factor (BCF)** 193.4 L/kg wet-wt

Chemical Name	Partition coefficient
Benzyl alcohol - indirect synthetic impurity	1.1
Benzaldehyde - indirect synthetic impurity	1.48

### 12.4. Mobility in soil

**Mobility in soil**

log Koc - 3.8

### 12.5. Results of PBT and vPvB assessment

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

### 12.6. Other adverse effects

No information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Waste from Residues/Unused Products</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Do not reuse container. Improper disposal or reuse of this container may be dangerous and illegal.

## SECTION 14: Transport information

### IMDG

<b>14.1 UN/ID no</b>	3082
<b>14.2 Proper Shipping Name</b>	Environmentally Hazardous Substance, liquid n.o.s.
<b>14.3 Hazard Class</b>	9
<b>14.4 Packing group</b>	III
<b>14.5 Marine pollutant</b>	This material meets the definition of a marine pollutant
<b>Environmental hazard</b>	Yes
<b>14.6 Special Provisions</b>	274, 335, 969
<b>EmS-No</b>	F-A, S-F
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	IBC02

### RID

<b>14.1 UN/ID no</b>	3082
<b>14.2 Proper Shipping Name</b>	Environmentally Hazardous Substance, liquid n.o.s.
<b>14.3 Hazard Class</b>	9
<b>14.4 Packing group</b>	III
<b>14.5 Environmental hazard</b>	Yes
<b>14.6 Special Provisions</b>	None

### ADR

<b>14.1 UN/ID no</b>	3082
<b>14.2 Proper Shipping Name</b>	Environmentally Hazardous Substance, liquid n.o.s.
<b>14.3 Hazard Class</b>	9
<b>Labels</b>	9, Marine Pollutant
<b>14.4 Packing group</b>	III
<b>14.5 Environmental hazard</b>	Yes
<b>14.6 Special Provisions</b>	274, 335, 375, 601
<b>Classification code</b>	M6
<b>Tunnel restriction code</b>	(-)

### ICAO (air)

<b>14.1 UN/ID no</b>	3082
<b>14.2 Proper Shipping Name</b>	Environmentally Hazardous Substance, liquid n.o.s.
<b>14.3 Hazard Class</b>	9
<b>14.4 Packing group</b>	III
<b>14.5 Environmental hazard</b>	Yes
<b>14.6 Special Provisions</b>	None

### IATA

<b>14.1 UN/ID no</b>	3082
<b>14.2 Proper Shipping Name</b>	Environmentally Hazardous Substance, liquid n.o.s.
<b>14.3 Hazard Class</b>	9
<b>14.4 Packing group</b>	III
<b>14.5 Environmental hazard</b>	Yes
<b>14.6 Special Provisions</b>	A97, A158, A197
<b>ERG Code</b>	9L

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

Chemical Name	French RG number	Title
Benzyl alcohol - indirect synthetic impurity 100-51-6	RG 84	-

**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

**Authorization 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

**15.2. Chemical safety assessment**

No information available

**SECTION 16: Other information****Full text of H-Statements referred to under section 3**

H302 - Harmful if swallowed

H400 - Very toxic to aquatic life

H411 - Toxic to aquatic life with long lasting effects

H313 - May be harmful in contact with skin

**Key literature references and sources for data**

Key Source: European Chemicals Agency, <http://echa.europa.eu>

**Issue date** 26-Mar-2015

**Revision date** 28-Jan-2019

**Revision note** Not applicable.

**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. Classification and labeling according to the IFRA/IOFI Labeling Manual 2017.

**End of Safety Data Sheet**





BEN0021

CAS#: 120-51-4

BENZYL BENZOATE -C

FEMA#: 2138

**PRODUCT IDENTIFICATION**

PRODUCT NAME	BENZYL BENZOATE -C
MOLECULAR FORM	C14H12O2
MOLECULAR WT	212.00
MELTING POINT (C)	
BOILING POINT (C)	323 deg C
FLASH POINT (F)	298 deg F
SHELF LIFE (DAYS)	730

PHYSICAL SPECIFICATIONS	RANGE	METHOD
APPEARANCE	COLORLESS OILY LIQUID	VISUAL
ODOR	SLIGHT AROMATIC ODOR	ORGANOLEPTIC
SPECIFIC GRAVITY (25C)	1.1160 to 1.1200	FCC METHOD
REFRACTIVE INDEX (20C)	1.5680 to 1.5700	FCC METHOD
SOLUBILITY	MISCIBLE IN ALCOHOL; INSOLUBLE IN GLYCERINE, WATER	FCC METHOD

ANALYTICAL SPECIFICATIONS	RANGE	METHOD
GC ANALYSIS	BENZYL ALCOHOL: 0.1 % MAX DIBENZYL ETHER: 0.05 % MAX BENZALDEHYDE: 0.02% MAX	CHEM_20.M
PURITY (BY GC)	99.0% MIN	CHEM_20.M

OTHER SPECIFICATIONS	RANGE	METHOD
ACID VALUE	1.0 MAX	FCC METHOD
ALDEHYDE, %	0.05 MAX	USP TEST
SOLIDIFICATION PT, DEG C	>= 18°C	BP TEST
CHLORINATED COMPOUNDS**	NEGATIVE	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



## **VEGAN / VEGETARIAN DECLARATION**

# BENZYL BENZOATE

to the best of our knowledge is suitable for both vegan and vegetarian diets.