



SAFETY DATA SHEET

99.9%

BENZYL BENZOATE

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. PRODUCT IDENTIFIER

Product name: Benzyl Benzoate
Product No.: BEBE
CAS-No.: 120-51-4
EC No.: 204-402-9
REACH: 01-2119976371-33
Synonym: Benzoic Acid Benzyl Ester
Chemical Formula: $C_{14}H_{12}O_2$

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Recommended use: This substance is used in the following products: washing & cleaning products, polishes and waxes, air care products, cosmetics and personal care products, perfumes and fragrances and biocides (e.g. disinfectants, pest control products).

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

HD Chemicals LTD
UNIT 9 Scott Business Park
PL2 2PB Plymouth UK

Contact Person responsible for SDS: Mr Peter Konefal, e-mail: contact@hdchemicals.co.uk

SECTION 2: HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification 67/548/EEC: Xn; R22, N; R51/53

Classification – EC 1272/2008: Acute toxicity, oral; Category 4 (H302)

Hazardous to the aquatic environment, chronic toxicity; Category 2 (H411)

2.2. LABEL ELEMENTS



SIGNAL WORDS

Warning

RISK PHRASES

- R22 Harmful if swallowed
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

HAZARD PHRASES

- H302 Harmful if swallowed
- H411 Toxic to aquatic life with long lasting effects

PROTECTION PHRASES

- P264 Wash thoroughly after handling
- P270 Do not eat, drink or smoke when using this product
- P273 Avoid release to the environment
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P391 Collect spillage
- P501 Dispose of contents / container according the regulation

SAFETY PHRASES

- S61 Avoid release to the environment. Refer to special instructions/safety data sheets

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

67/548/EEC/1999/45/EC

Composition information – main constituents

Substance name	Mol. Formula	REACH	Typical conc. (%w/w)	EINECS No.	CAS-No.	Classification
Benzyl Benzoate	C ₁₄ H ₁₂ O ₂	01-2119976371-33	100%	204-402-9	120-51-4	Xn; R22, N; R51/53

EC 1272/2008

Composition information – main constituents

Substance name	Mol. Formula	REACH	Typical conc. (%w/w)	EINECS No.	CAS-No.	Classification
Benzyl Benzoate	C ₁₄ H ₁₂ O ₂	01-2119976371-33	100%	204-402-9	120-51-4	H302, H411

SECTION 4: FIRST AID MEASURES**4.1. DESCRIPTION OF FIRST AID MEASURES**

First-aid measures general: Consult a physician when you feel unwell. Show this safety data sheet to the doctor in attendance.

Inhalation: Remove victim to fresh air immediately and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Never give anything by mouth to an unconscious person. Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. Get medical attention if any discomfort continues.

Skin contact: Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. If skin irritation persists, call a physician.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.



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

Inhalation:	May cause difficulty breathing and shortness of breath, respiratory paralysis or failure
Ingestion:	Harmful if swallowed. May cause nausea, vomiting and diarrhoea. Ataxia, weakness, convulsions.
Skin contact:	May cause skin irritation
Eye contact:	May cause eye irritation

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

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. Adjust extinguishing media to the surrounding fire. Use alcohol resistant foam, dry powder, carbon dioxide (CO₂) or water spray.

Unsuitable extinguishing media: Do not use water jet.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Thermal decomposition can lead to release of irritating gases and vapours: carbon monoxide (CO), carbon dioxide (CO₂). May be combustible at high temperatures. Keep product and empty container away from heat and other sources of ignition.

5.3. ADVICE FOR FIRE-FIGHTERS

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Wear suitable protective equipment (splash goggles, protective suit, boots, gloves and self-contained breathing apparatus) to prevent any contamination of skin, eyes and personal clothing. Ensure adequate ventilation of the working area. Avoid contact with skin and eyes. Remove all sources of ignition. Avoid breathing vapours, mist or gas. Avoid formation of dust. Keep unprotected persons away. Evacuate personnel to a safe area. For personal protection see section 8.1.



6.2. ENVIRONMENTAL PRECAUTIONS

Avoid release to the environment. Do not allow to enter sewers/ surface or ground water. Do not allow to enter into soil/subsoil. Prevent further leakage or spillage if safe to do so. Use appropriate container to avoid environmental contamination. Local authorities should be advised if significant spillages cannot be contained.

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

If the product is in solid form: Use a shovel to put the material into a convenient waste disposal container. If the product is in liquid form: Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

SECTION 7: HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

Handle in accordance with good industrial hygiene and safety practice. Avoid formation of dust and spilling. Do not inhale dust/smoke/mist. Ensure adequate ventilation of the working area. Wear personal protective equipment. Avoid contact with eyes and skin. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products. Remove contaminated clothing and shoes. Wash clothing before re-using. Avoid the formation or spread of mists in the air.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Keep in a cool, dry, well ventilated area. Keep in original tightly closed containers. Store at room temperature. Keep away from food, drink and animal feeding stuffs. Avoid heat and other sources of ignition. Avoid exposure to light and air. Keep away from incompatible materials such as strong oxidizing agents, reducing agents and from highly alkaline or acidic materials.

7.3. SPECIFIC END USE(S)

See section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. CONTROL PARAMETERS/EXPOSURE GUIDELINES

Occupational Exposure Limit Values (Benzyl Benzoate):

CAS NO	Exposure limit	Value	Name of Agent
120-51-4	TWA – 8 Hrs	No data available	No data available

120-51-4	STEL – 15 Min	No data available	No data available
----------	---------------	-------------------	-------------------

Engineering controls: Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands before breaks and at the end of the working day.



EYE PROTECTION



FACE SHIELD



RESPIRATOR



PROTECTION WEAR



HAND PROTECTION

Protective equipment: Use protective chemical safety goggles (European standard - EN 166), face shield, gloves (European standard - EN 374), long sleeved clothing to prevent skin, body and eyes exposure.

Respiratory equipment: Respiratory protection not required in normal conditions, but when vapours or aerosols are generated must use appropriate certified respirators, which are NIOSH/MSHA or European Standard EN 149 approved respirator.

Skin and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure. Wear impervious protective clothing (long sleeved clothing, chemical resistant apron, anti static boots). Wear appropriate protective work gloves when handling material to prevent skin contact. The glove material has to be impermeable and resistant to the product: recommended are rubber gloves. Protective gloves should be replaced at first signs of wear. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact. Wash and dry hands.

Eye/Face protection: Approved chemical safety goggles or face protection.



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid
Colour:	Colourless
Odour:	Weakly aromatic
Initial boiling point (°C):	No data available
Melting point (°C):	21 °C
Freezing point:	No data available
Relative density:	1.118 g/cm ³
Specific gravity / density:	Not available
Vapour density:	Not available
Vapour pressure:	Not available
Flash point (°C):	Not available
Molecular mass:	212.25 g/mol
Auto-ignition temperature:	Not applicable
Oxidizing properties:	Not available
Decomposition temperature:	Not available
Molecular formula:	C ₁₄ H ₁₂ O ₂

SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

Benzyl Benzoate is stable under normal conditions of use, storage and transport.

10.2. CHEMICAL STABILITY

This product is stable under normal conditions and under recommended usage and storage.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

When heated can decompose. May liberate toxic gases.

10.4. CONDITIONS TO AVOID

Store at room temperature. Keep away from food, drink and animal feeding stuffs. May be combustible at high temperatures. Keep product and empty container away from heat and other sources of ignition. Avoid exposure to light and air.



10.5. INCOMPATIBLE MATERIALS

May liberate toxic gases. Keep away from incompatible materials such as strong oxidizing agents, reducing agents and from highly alkaline or acidic materials.

10.6. HAZARDOUS DECOMPOSITION

Thermal decomposition can lead to release of irritating gases and vapours: carbon monoxide (CO), carbon dioxide (CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

TOXIC DOSE	LD50 Oral – Rat – 1700 mg/kg LD50 Dermal – Rabbit – 4000 mg/kg
Inhalation:	May cause difficulty breathing and shortness of breath, respiratory paralysis or failure
Ingestion:	Harmful if swallowed. May cause nausea, vomiting and diarrhoea. Ataxia, weakness, convulsions.
Skin contact:	May cause skin irritation
Eye contact:	May cause eye irritation

SECTION 12: ECOLOGICAL INFORMATION

12.1. TOXICITY

Aquatic Toxicity:

Toxicity to freshwater fish:	LC50: 0,29 mg/l, 96h (Danio rerio)
Toxicity to water flea:	EC50: 3,09 mg/l, 48h (Daphnia magna)
Toxicity to algae:	EC50: 0,475 mg/l, 72 h (Pseudokirchneriella subcapitata)

12.2. PERSISTENCE AND DEGRADABILITY

Readily biodegradable.

12.3. BIOACCUMULATIVE POTENTIAL

No bioaccumulation potential.

12.4. MOBILITY

No data available.



12.5. RESULTS OF PBT AND vPvB ASSESSMENT

This substance is not a PBT or vPvB.

12.6. OTHER ADVERSE EFFECTS

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste disposal recommendations: Disposal of Benzyl Benzoate should be in accordance with local and national legislation. Processing, use or contamination of this product may change the waste management options. Should not be released into the environment. Do not discharge into waterways or sewer systems. Mixing with other materials or other alterations to pure product may significantly change the characteristics of the material. Empty packaging can have residues and are subject to proper waste disposal. Do not re-use empty containers. Keep product and empty container away from heat and sources of ignition. The waste may be classified as "special" or hazardous per State regulations. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

Follow the provisions of Directive 2008/98/EC regarding waste management.

Uncleaned packaging: Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

IMDG

UN number	3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Transport hazard class(es)	9
Packing group	III

ADR/RID

UN number	3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Transport hazard class(es)	9
Packing group	III

IATA

UN number	3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Transport hazard class(es)	9
Packing group	III



SECTION 15: REGULATORY INFORMATION

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures.

15.2 CHEMICAL SAFETY ASSESSMENT

A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

General information

The information contained in this safety data sheet is provided in accordance with the requirements of the regulations. The product should not be used for purposes other than those shown in section 1 without first referring to the supplier and obtaining written handling instruction. As the specific conditions of use of the product are outside the suppliers control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.

Revision Comments

This information is provided in a revised format to that previously produced.

Revision Date: 01/10/2018

Revision: 01

Safety Data Sheet Status Approved.

Date printed 01/10/2018

Signature Initials P.K.

DISCLAIMER:

If this product is re-distributed and re-formulated for sale, details of its hazards and recommended methods for safe handling must be passed to customers. Customers are urged to ensure that the product is entirely suitable for their own purpose. It is the customer's responsibility to ensure that a suitable and sufficient assessment of the risks created by a work activity using this product is undertaken before this product is used.



NOTE:

The information contained in this Safety Data Sheet does not constitute the users own assessment of workplace risk as required by other Health & Safety Legislation (e.g. the Health and Safety at Work Act,1974;the control of Substances Hazardous to Health Regulations,1988). The data given here is based on current knowledge and experience. The purpose of this data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the product's properties.