

TECHNICAL DATA SHEET

BENZYL SALICYLATE

Synthetic aromatic ester of salicylic acid

1. RAW MATERIAL IDENTIFICATION

Product name	Benzyl Salicylate
Chemical name	Benzoic acid, 2-hydroxy-, phenylmethyl ester
Synonyms	Benzyl 2-hydroxybenzoate; salicylic acid benzyl ester
INCI name	BENZYL SALICYLATE
CAS number	118-58-1
EC number	204-262-9
REACH number	01-2119969442-31-XXXX
FEMA number	2151
JECFA number	904
FLAVIS number	09.752
Molecular formula	C ₁₄ H ₁₂ O ₃
Molecular weight	228.24 g/mol
Raw material origin	Synthetic
Geographical origin	India
Raw material category	Aroma chemical

2. OLFACTORY CLASSIFICATION AND ODOUR PROFILE

Benzyl Salicylate belongs to the Floral / Balsamic olfactory family and functions primarily as a base note in fragrance compositions.

Its odour is mild, sweet and floral, with a soft white-floral character and balsamic, musky, subtly woody and mildly medicinal nuances.



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3. DESCRIPTION AND FUNCTION IN FRAGRANCE COMPOSITION

Benzyl Salicylate is a synthetic floral-balsamic aroma chemical with a mild, sweet and persistent odour. It has a soft white-floral character accompanied by subtle musky, balsamic, woody and mildly medicinal nuances.

Owing to its low volatility and good substantivity, it is used as a building material in floral bases and as a fragrance fixative. It contributes fullness, softness and continuity between individual notes without creating a sharp or dominant olfactory effect.

It is particularly important in jasmine, ylang-ylang, tuberose, gardenia and other white-floral compositions. It is also frequently used as a carrier or solvent for certain perfumery materials.

It combines well with jasmine materials, ylang-ylang, benzyl benzoate, benzyl acetate, linalool, hydroxycitronellal, methyl ionone compounds, ionones, other salicylates, sandalwood, patchouli, vanillin, coumarin, amber materials and musk aroma chemicals.

Functional role in perfumery: A floral-balsamic base note, fixative and linking component. It extends fragrance longevity, softens transitions between middle and base notes and adds fullness to floral, oriental, musky and chypre accords.

4. APPLICATION AND OLFACTORY COMPATIBILITY

Recommended use in fragrances: For building soft floral and balsamic base notes, enhancing white-floral accords and increasing fragrance substantivity.

It is used to create and modify:

- jasmine, ylang-ylang, tuberose and gardenia accords;
- white-floral compositions;
- floral-balsamic and floral-musky bases;
- fougère and chypre fragrances;
- amber and oriental compositions;
- powdery and soft woody accords;
- solar and warm floral compositions;
- carnation, lily and narcissus fragrances;
- fragrance bases requiring greater fullness and substantivity;
- fragrances for soaps, cosmetic products and household-care products.

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5. RECOMMENDED USE

Recommended use range	1.00-15.00% in the fragrance concentrate
Method of addition	May be added directly to the fragrance concentrate
Laboratory dilution	If required, prepare a 10% or 50% solution in ethanol, DPG or another compatible perfumery solvent
IFRA status	Restricted
Category 4 - fine fragrance	Maximum 7.3% in the finished product according to the available certificate for the 51st IFRA Amendment

If crystallisation occurs, the closed container may be gently warmed until the material becomes homogeneous again. The stated range is formulation guidance and does not represent a regulatory maximum concentration. Before use, verify the current IFRA certificate issued by the specific supplier and the applicable finished-product category.

6. PHYSICOCHEMICAL AND TECHNICAL DATA

Appearance	Clear liquid
Colour	Colourless to slightly yellow
Odour	Mild, sweet and floral, with balsamic, musky and subtly woody nuances
Purity	99.0-100.0%
Relative density at 20 °C	1.180-1.185
Relative density at 25 °C	1.175-1.185
Refractive index at 20 °C	1.577-1.582
Refractive index at 25 °C	1.575-1.580
Melting point	Approximately 24 °C
Boiling point	Approximately 318 °C
Flash point	Approximately 176.5 °C, closed cup
Solubility	Practically insoluble in water; soluble in ethanol, perfumery oils and common organic solvents



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7. STABILITY AND COMPATIBILITY

Stable under the recommended storage conditions. At lower temperatures, increased viscosity or crystallisation may occur. It combines well with floral, balsamic, musky, amber, woody and chypre materials. Compatibility, stability, colour and odour profile must be confirmed in the finished formulation and intended packaging.

8. REGULATORY DATA AND STATUS

Vegan status: Vegan; no raw materials of animal origin are used in the manufacturing process.

GMO status: Not derived from GMOs and contains no GMOs.

Nanomaterials: Contains no nanomaterials according to relevant regulatory definitions.

IFRA status: Restricted. The maximum permitted concentration depends on the finished-product category. For Category 4, the available certificate for the 51st IFRA Amendment states a maximum of 7.3% in the finished product.

Allergen status: Benzyl Salicylate is a declarable fragrance allergen under Regulation (EU) 2023/1545. It must be declared when its concentration exceeds 0.001% in leave-on products or 0.01% in rinse-off products.

9. STORAGE AND SHELF LIFE

Store at temperatures up to 25 °C in the original, hermetically sealed container, protected from light, heat and prolonged contact with air. Avoid low temperatures at which solidification may occur.

Recommended storage temperature: Maximum 25 °C.

Shelf life: 24 months under the prescribed storage conditions.

10. SAFETY INFORMATION

Benzyl Salicylate is intended for professional use as an ingredient in fragrance and cosmetic compositions. It must not be applied directly to the skin in concentrated form.

According to the Safety Data Sheet: H317 - May cause an allergic skin reaction; H319 - Causes serious eye irritation; H412 - Harmful to aquatic life with long-lasting effects.

Wear suitable protective gloves and eye protection. Avoid contact with skin and eyes and inhalation of vapour or aerosol. Prevent release into drains, soil and waterways.

11. DISCLAIMER

The information applies solely to the described raw material and does not replace the specification, COA, IFRA documentation or SDS issued by the specific manufacturer. The user is responsible for verifying suitability, stability, safety and regulatory compliance in the intended application and target market. This document does not constitute regulatory approval or a guarantee of finished-product properties.