

TECHNICAL DATA SHEET

DIHYDROIONONE GAMMA

Synthetic hydrogenated ionone derivative with an elegant violet-orris, powdery and woody character

1. RAW MATERIAL IDENTIFICATION

Product name	Dihydroionone Gamma
Synonyms	Gamma DHI; Dihydro Gamma Ionone
INCI name	4-(1,1-DIMETHYLETHYL)CYCLOHEXANONE
CAS number	13720-12-2
Molecular formula	C ₁₃ H ₂₂ O
Molecular weight	194.31 g/mol
Chemical group	Hydrogenated ionone derivative
Raw material type	Synthetic aroma chemical
Raw material origin	Synthetic
Raw material category	Aroma chemical

2. OLFACTORY CLASSIFICATION AND ODOUR PROFILE

Dihydroionone Gamma belongs to the woody-floral / violet-orris / powdery olfactory family and functions as a middle note with a pronounced base-note effect.

Its odour profile is woody, violet-like, powdery and warm, with cashmere-like and suede-like nuances and a mild amber undertone. The overall effect is elegant, soft and refined.



TECHNICAL DATA SHEET

3. DESCRIPTION AND FUNCTION IN FRAGRANCE COMPOSITIONS

Dihydroionone Gamma is a sophisticated synthetic aroma chemical from the woody-floral and violet-orris olfactory family. It is a hydrogenated ionone derivative with an elegant, warm and highly versatile odour profile.

The material combines woody, violet-like and powdery facets with gentle amber warmth, a cashmere-like effect and a refined floral character reminiscent of soft luxury woods and suede accords.

It is particularly suitable for woody-floral fragrances, violet accords, orris compositions, suede bases and modern niche fragrances. It contributes depth, elegance and a luxurious powdery effect without introducing excessive sweetness.

Dihydroionone Gamma combines well with ionones, orris bases, sandalwood materials, cedarwood, vetiver, musks, Iso E Super materials and amber accords.

Functional role in perfumery: Dihydroionone Gamma acts as a powdery woody-floral middle note with a lasting base effect. It provides depth, soft violet-orris character and elegant transitions between floral, woody, musky, suede and amber elements.

4. APPLICATION AND OLFATORY COMPATIBILITY

Recommended use in perfumery: For building violet and orris accords, woody-floral fragrances, suede bases and refined powdery compositions.

It is used to create and modify:

- violet accords;
- orris and iris compositions;
- woody-floral fragrances;
- suede and powdery bases;
- cashmere-like woody accords;
- modern niche fragrances;
- musky and amber compositions;
- fragrances for cosmetic and personal-care products.

The material shows very good compatibility with floral, woody, musky and amber fragrance bases. It is particularly effective with ionones, orris materials, sandalwood, cedarwood, vetiver, Iso E Super materials and soft musks.



TECHNICAL DATA SHEET

5. RECOMMENDED USE

Recommended range	0.1-3.0% in fragrance compositions
Violet accords	0.2-3.0%
Orris compositions	0.1-2.0%
Woody-floral fragrances	0.2-3.0%
Suede and powdery bases	0.1-2.0%

Pre-dilution in ethanol, dipropylene glycol (DPG) or triethyl citrate (TEC) is recommended for easier dosing and more precise balancing of the formula. The stated ranges are formulation recommendations and do not represent regulatory maximum concentrations. Verify the current IFRA certificate for the relevant finished-product category.

6. PHYSICOCHEMICAL AND TECHNICAL DATA

Appearance	Liquid
Colour	Colourless to pale yellow
Odour	Woody, violet-like, powdery, warm and elegant
Olfactory character	Elegant powdery woody-floral profile with violet-orris, cashmere-like, suede-like and mild amber nuances
Density at 20 °C	0.930-0.960
Refractive index at 20 °C	1.470-1.500
Flash point	>100 °C
Purity	≥95%
Solubility	Soluble in alcohol and fragrance bases



TECHNICAL DATA SHEET

7. STABILITY AND COMPATIBILITY

Dihydroionone Gamma shows very good stability in fragrance formulations and is highly compatible with floral, woody, musky and amber fragrance bases. Compatibility, stability, colour and odour profile should be confirmed in the intended finished formulation and packaging.

8. REGULATORY INFORMATION AND STATUS

Vegan status: Vegan; contains no ingredients of animal origin.

GMO status: Does not contain GMOs and is not derived from GMO raw materials.

IFRA status: Not stated in the supplied data. Verify the current IFRA certificate before use in the finished product.

Nanomaterials: Not stated in the supplied data; confirm with the supplier.

9. STORAGE AND SHELF LIFE

Store in the original, tightly closed container, protected from light, air and sources of heat. Close the container immediately after use.

Recommended storage temperature: Maximum 25 °C.

Shelf life: 24 months under the recommended storage conditions.

10. SAFETY INFORMATION

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

Use suitable protective gloves and eye protection. Avoid direct contact with the skin and eyes and avoid inhalation of vapour or aerosol. Work in a well-ventilated area and follow the current Safety Data Sheet for the specific product.

11. DISCLAIMER

The information applies exclusively to the described raw material and does not replace the specification, Certificate of Analysis, IFRA documentation or Safety Data Sheet of the specific manufacturer. The user is responsible for verifying identity, suitability, stability, safety and regulatory compliance in the intended application and target market. This document does not constitute regulatory approval or a guarantee of the properties of the finished product.