

TECHNICAL DATA SHEET

ADOXAL

Trimethylundecenal · synthetic aldehydic aroma chemical

1. PRODUCT IDENTIFICATION

Product name	ADOXAL
Synonym	Farenal
CAS number	141-13-9
INCI name	Trimethylundecenal
Molecular formula	C ₁₄ H ₂₆ O
Raw material type	Synthetic aldehydic aroma chemical
Olfactory family	Aldehydic, woody
Position in perfume	Top to middle note
Country of origin	India

2. OLFACTORY CLASSIFICATION AND ODOUR PROFILE

ADOXAL belongs to the aldehydic-woody olfactory family. It is characterised by a clean and pronounced aldehydic profile, with mild woody and discreet milky-lactonic nuances. Its odour is reminiscent of a modified C11 aldehyde, although its profile is rounder and more complex, allowing it to be incorporated easily into contemporary fragrance structures.

In a composition, it provides strong diffusion and contributes clarity, airiness and definition to the opening. The aldehydic component introduces a bright, clean character, while the mild woody nuance adds structure and connects the more volatile top notes with the heart of the composition. The discreet milky-lactonic nuance softens the sharpness of the aldehydic profile.

3. FUNCTION IN A FRAGRANCE COMPOSITION

At lower concentrations, ADOXAL functions as a modifier that enhances freshness, projection and transparency. At higher dosages, its aldehydic identity becomes more pronounced. Owing to its good diffusion, relatively low concentrations can provide a noticeable olfactory effect.

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4. APPLICATION AND COMPATIBILITY

ADOXAL is intended for professional use in perfume and cosmetic fragrance compositions. It is particularly suitable for aldehydic perfumes, white-floral accords, musk bases and contemporary clean fragrance structures. In floral accords, it can improve diffusion and enhance the impression of cleanliness, particularly in combination with jasmine, tuberose, lily of the valley and orange blossom.

It blends well with musks, sandalwood, cedarwood, amber materials and other clean woody ingredients. Compatibility, stability and the olfactory result should be confirmed by practical testing in the intended finished-product base.

5. RECOMMENDED USE

It is used as an aldehydic modifier in floral, woody, musky and contemporary clean compositions to enhance diffusion, brightness and fragrance structure. The typical concentration in a perfume composition is 0.05-0.5%. This range is indicative; the dosage should be adjusted according to the application, base and desired effect.

6. PHYSICOCHEMICAL DATA

Appearance	Liquid
Colour	Colourless to pale yellow
Odour	Aldehydic
Density at 25 °C	0.845-0.853
Refractive index at 20 °C	1.445-1.455
Flash point	110 °C
Purity	85.0-100.0%
Solubility	Not specified in the technical data provided

7. STABILITY

The product remains stable under the specified storage conditions when protected from air and light. The stability of the finished formulation should be evaluated in the intended packaging and under the anticipated conditions of use.

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8. REGULATORY AND STATUS INFORMATION

IFRA status: Use must comply with the current IFRA restrictions applicable to the relevant finished-product category. The current IFRA certificate for ADOXAL must be consulted during formulation, and the applicable maximum permitted concentrations must be observed.

Vegan status: Vegan; does not contain ingredients of animal origin.

GMO status: Does not contain GMOs and is not derived from genetically modified organisms, in accordance with Regulations (EC) No 1829/2003 and No 1830/2003.

9. STORAGE AND SHELF LIFE

Store in the original, well-filled and tightly closed container, protected from air and light, at a temperature not exceeding 25 °C. Shelf life is 12 months under the specified storage conditions. Close the container immediately after use.

10. SAFETY INFORMATION

The product is a professional raw material intended for the preparation of perfume and cosmetic fragrance compositions. Do not use undiluted as a finished cosmetic product. Refer to the current Safety Data Sheet (SDS) for hazard classification, safe handling, first-aid measures and disposal instructions.

11. DISCLAIMER

The information in this technical data sheet relates to the material described and is based on the technical data provided. The user is responsible for verifying the product's suitability, stability, safety and regulatory compliance in the intended formulation and application. This document does not constitute a guarantee of the properties of the finished product.