Substance Information Document

Vetiver oil

1. Substance identity

Name	Vetiver oil
Synonyms	4,8-dimethyl-2-(propan-2-ylidene)-1,2,3,3a,4,5,6,8a-octahydroazulen-6-ol; Java vetiver oil; Oil of vetiver; Oils, vetiver; VETIVER, OIL (VETIVERIA ZIZANIOIDES STAPF); Vetiver oil (Vetiveria zizanioides stapf); Vetiver oil distilled; Vetiveria Zizanoides Root Oil
IUPAC Name	N/A*
CAS	8016-96-4

*Non answered, IUPAC Name was not found.

2. Toxicological information

Vetiveria zizanioides (L.) Nash. Vetiveria Zizanoides Root Oil is an essential oil distilled from the dried roots of the grass Vetiveria zizanoides (L.) Nash Poaceae. Vetiver oil has a high sesquiterpene content. The ketones alpha-vetivone (CAS 15764-04-2) (6-12%) and beta-vetivone (CAS 18444-79-6) (4- 10%), which usually form more than 10% of the oil, as well as khusimol (CAS 16223-63-5) (24-36%) and isovelencenol (CAS 22387-74-2) (12-24%) are the main constituents (in Bourbon oil, i.e., from Réunion). For Oil of vetiver (Vetiveria zizanioides (L.) Nash) an ISO standard exists: ISO 4716:2002. Vetiver oil is approved as natural flavoring substances and natural substances used in conjunction with flavors as per 21CFR§ 172.510.

Limited toxicological information is available on the specific CAS number. However, vetiver oil (CAS 84238-29-9) showed low acute and dermal toxicity in animals with LD50 of more than 5’000 mg/kg bw in rats (oral) and in rabbits (dermal).

Multiple studies on the skin sensitising potential of Vetiver Oil are available. Because of the comparable reliability between the studies and differing outcomes, a Weight of Evidence approach was used to describe the endpoint of skin sensitisation. Based on animal and human testing, vetiver oil is a substance that possesses the ability to induce sensitisation. Vetiver oil is considered as a natural extract with positive human data, which are, however, not sufficient to categorise as “established contact allergen in humans”.

Vetiver oil was found non-mutagenic in a compliant Ames test according to OECD testing guideline 471 in presence and absence of metabolic activation.

No data were identified for carcinogenicity, reproductive and developmental toxicity, and repeated dose toxicity.

JECFA	-
FEMA	-
EFSA	-
ECHA – REACH dossier	Registration Dossier - ECHA (europa.eu) (CAS 84238-29-9)
PUBCHEM	SID 176259153 - PubChem (nih.gov)
CIR	-
OSHA	-

3. Addictiveness and attractiveness

No substance-specific data were identified.

SCENIHR	-
EMA	-
PUBMED	-