

Substance Information Document

Petitgrain oil

1. Substance identity

Name	Petitgrain oil
Synonyms	Mandarin petitgrain oil Oil citrus reticulata Oil mandarin Oils, petitgrain Orange leaf oil, bitter Orange leaf water, absolute Petitgrain absolute (Citrus aurantium L.)
IUPAC Name	N/A*
CAS	8014-17-3

*Non answered, IUPAC Name was not found.

2. Toxicological information

According to the ECHA registered dossier, petitgrain oil's LD₅₀ for acute oral toxicity in rats is >5000 mg/kg bw. In addition, based on its typical composition (mainly linalyl acetate and linalool), petitgrain oil was classified as a skin and eye irritant but, in contrast, not as a skin sensitizer. In terms of bacterial mutagenesis, no significant increases in the frequency of revertant colonies were recorded for any of the bacterial strains, with any dose, either in the presence or absence of metabolic activation in a study aligned with OECD TG 471. Thus, petitgrain oil is considered as non-mutagenic according to the Ames test.

JECFA	-
FEMA	GRAS substance: https://www.femaflavor.org/flavor-library/petitgrain-oil-citrus-aurantium-l Affirmed GRAS status: https://www.sciencedirect.com/science/article/pii/S0278691518308548?via%3Dihub#tbl6
EFSA	No concerns for consumer safety were identified following the use of the additive up to highest safe level in feed for the target animals: https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2021.6624
ECHA – REACH dossier	https://echa.europa.eu/registration-dossier/-/registered-dossier/21322/1/1
PUBCHEM	https://pubchem.ncbi.nlm.nih.gov/substance/135317653

CIR	https://www.cir-safety.org/sites/default/files/cleaf122016rep.pdf
OSHA	-

3. Addictiveness and attractiveness

No substance-specific information was identified.

SCENIHR	-
EMA	-
PUBMED	-