



05 February 2026

## Chemical profile

# Glycerides

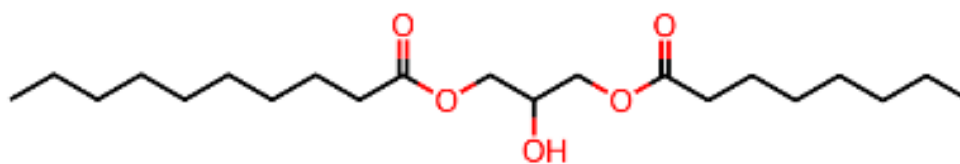
### Summary

- The chemicals are a group of structurally similar, medium to long chain glycerides that are used in high volumes in Australia, most commonly as surfactants, softeners, or lubricating agents, in various domestic and commercial products.
- The chemicals are used in personal care products, household cleaning products, lubricant and grease products, and many other industrial products.
- The chemicals in this group are expected to be of low risk to the environment.

### Chemical identity

The chemicals in this group have similar use and environmental release patterns and are expected to have similar environmental effects. These chemicals are a group of esters of monocarboxylic acids and glycerol bearing one (monoglycerides), two (diglycerides), or three (triglycerides) aliphatic chains, or a mixture of mono-, di- and triglycerides each ranging in number of carbons. Glycerides are a group of lipids commonly called fats (solid at room temperature) and oils (liquid at room temperature).

- **Chemical name:** Glycerides
- **CAS registry number:** 65381-09-1 and others (see CAS RN list)



**Figure 1. Representative chemical structure for the Glycerides group (Decanoic acid, ester with 1,2,3-propanetriol octanoate; CAS RN 65381-09-1)**

### Hazards and risks to the environment

The Australian Industrial Chemicals Introduction Scheme (AICIS) evaluated the environmental risk of the class of chemicals. Additionally, the [OECD SIDS Assessment Profile on glycerides](#) concluded that the assessed chemicals do not possess properties indicating a hazard for the environment. They are expected to be rapidly and ultimately degradable and to have low aquatic toxicity. The chemicals in this group are categorised as not persistent (nP), not bioaccumulative (nB), and not Toxic (nT) according to the Australian Environmental Criteria for Persistent, Bioaccumulative and/or Toxic Chemicals (DCCEEW 2022). Glycerides are naturally occurring substances and are expected to be present in Australian surface waters at concentrations below the level of concern.

## Introduction and use of glycerides in Australia

Glycerides are used as surfactants, softeners, and lubricating agents in a range of consumer and industrial products. The chemicals in this group were assessed for their use in personal care products, household cleaning products, and other domestic and industrial products.

Based on information provided in environmental risk assessments, the chemicals in this group have a use volume in the tens of thousands of tonnes per year in Australia.

## References

AICIS (2019). [IMAP Tier I Environmental Assessment](#), 13 December 2019, Australian Industrial Chemicals Introduction Scheme.

DCCEEW (2022). [Australian Environmental Criteria for Persistent, Bioaccumulative and/or Toxic Chemicals](#), Version 1, October 2022, Department of Climate Change, Energy, the Environment and Water (DCCEEW).

NICNAS (2008). Hexanoic acid, 2-ethyl, 1,2,3-propanetriyl ester (Triethylhexanoin), [Full Public Report LTD/1277](#), February 2008, National Industrial Chemicals Notification and Assessment Scheme (NICNAS).

NICNAS (2009). Glycerides, castor-oil mono-, hydrogenated, acetates, [Full Public Report STD/1334](#), October 2009, National Industrial Chemicals Notification and Assessment Scheme (NICNAS).

NICNAS (2020). Glycerides, C<sub>16-18</sub> mono-, di- and tri-, hydrogenated, citrates, sodium salts, [Public Report EX/232 \(LTD2072\)](#), January 2020, National Industrial Chemicals Notification and Assessment Scheme (NICNAS).

OECD (2014). SIDS Initial Assessment Profile (SIAP): Glycerides Category, [CoCAM \[Cooperative Chemicals Assessment Meeting\] 6 30 – 3 October, 2014](#), Organisation for Economic Co-operation and Development.

## More information

Email [ichems.enquiry@dcceew.gov.au](mailto:ichems.enquiry@dcceew.gov.au)

Web <https://www.dcceew.gov.au/environment/protection/chemicals-management/national-standard>