Kao Corporation



GLOBAL PRODUCT STRATEGY SAFETY SUMMARY

KALCOL 6850

This document is a high-level summary intended to provide the general public with an overview of product safety for this substance. It is not intended to replace the Safety Data Sheet, which is available from suppliers and should be referred to for full details of recommended safety procedures for each type of use. It is not intended to replace or supersede manufacturer's instructions and warnings for their consumer products containing this substance.

1. Substance Identity

Brand Name: KALCOL 6850

Chemical Name: Fatty alcohol C16 - C18

CAS Number: 67762-27-0

2. Uses and Applications

KALCOL 6850 is a long chain aliphatic alcohol which is mainly used as a synthetic intermediate in an industrial setting. Consumer uses of KALCOL 6850 include personal care, household care and cosmetic products. These uses generally relate to its solubilising and/or emulsifying properties.

3. Physical/chemical properties

KALCOL 6850 has no identified physicochemical hazards.

Property	Value
Physical state	Solid or granulated
Colour	White

Odour	Slight, Characteristic (alcohol)
рН	Not applicable
Density	No information available
Viscosity	No information available
Melting point	51 – 54 °C (flow point)
Boiling point	No information available
Flash point	No information available
	170°C (similar substance, CLEVELAND open cup method)
Flammability	No information available
Explosive properties	No information available
Self – ignition temperature	No information available
Vapour pressure	No information available
Water solubility	Insoluble
Octanol-water partition coefficient (log K _{ow)}	No information available

4. Health information

Consumer: Consumers should not come into contact with harmful levels of KALCOL 6850.

Worker: The overall toxicity of KALCOL 6850 arising from repeated exposure is considered to be low.

Effect assessment	Result (REACH assessment)
Acute toxicity Oral / inhalation / dermal	Virtually not toxic after oral, inhalation or dermal exposure. Not identified to have specific target organ toxicity after single exposure.
Irritation / corrosion Skin / eye / respiratory tract	Almost no irritating.
Sensitisation	No sensitizer.
Toxicity after repeated exposure Oral / inhalation / dermal	Virtually not toxic after oral, inhalation or dermal exposure. Not identified to have specific target organ toxicity after repeated

Effect assessment	Result (REACH assessment)
	exposure.
Genotoxicity / Mutagenicity	Not mutagenic.
Carcinogenicity	Not considered carcinogenic based on data derived from studies on repeated exposure.
Toxicity for reproduction	Based on available data no developmental or reproductive toxicity is anticipated.

5. Environmental information

Based on the available information, KALCOL 6850 does not have any known toxic effects on the environment. In addition, the amount of substance released into the aquatic environment is low and fatty alcohol C16-C18 is also found to occur naturally in the environment. Furthermore, biodegradation by micro-organisms in municipal waste-water treatment plants, and in the wider environment, is demonstrated to be extremely rapid and efficient.

REACH environmental exposure assessment sets limits to safe release of the substance during all steps of manufacture and industrial use, and defines appropriate risk management measures. Furthermore, KALCOL 6850 does not bioaccumulate, is rapidly biodegradable and will not persist in the environment.

Effect assessment	Result (REACH assessment)
Aquatic toxicity	No toxic effects to the environment.
Biodegradation	Readily biodegradable
Bioaccumulation potential	Not bioaccumulative
PBT / vPvB	Not considered to be PBT or vPvB.
(Persistent, Bioaccumulative and Toxic / Very Persistent and Very Bioaccumulative)	

6. Exposure potential

Human health

The exposure of consumers to KALCOL 6850 in end products is at safe levels. However, workers who may come into contact with the undiluted substance should follow the safety measures recommended in the Safety Data Sheet, as the undiluted substance causes irritation. It is expected that facilities using formulations containing KALCOL 6850 would

have standard engineering controls and procedures in place, to ensure safe handling and use of a wide variety of chemicals, whether process aids or reagents. In addition, standard personal protective equipment must be worn to prevent direct skin and eye contact with chemicals handled during routine operations, such as goggles or safety glasses, gloves, safety boots and helmets. There is evidence that a number of types of chemical-resistant gloves offer good protection against KALCOL 6850 and related substances. Indirect exposure of humans via the environment is dominated by regional background, however due to the widespread use of fatty alcohol C16-C18 in consumer products in EU, this background exposure is less relevant.

Environment

Losses to air of KALCOL 6850 in aqueous-based products are expected to be minimal. Releases to waste water may be assumed to be up to 100%, since in many personal care and household products, as well as some of the industrial processes, the substance is discharged to waste water. However, details of treatment of aqueous waste vary at different sites and processes and in general aqueous waste streams would be subjected to secondary biological treatment either on- or off-site. Solid waste disposal is typically disposed via landfill or incineration.

7. Risk management recommendations

For detailed risk management recommendations, please refer to the Safety Data Sheet.

When using chemicals, make sure that there is adequate ventilation. Always use appropriate chemical resistant gloves to protect your hands and skin and always wear eye protection such as chemical goggles. Do not eat, drink, or smoke where chemicals are handled, processed, or stored. Wash hands and skin following contact. If the substance gets to your eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

All effluent releases that may include the substance must be directed to a waste water treatment plant that removes the substance from the final releases to the receiving water. Releases to air are not expected and therefore no specific recommendations are required.

8. Regulatory information / Classification and labelling

Under GHS, substances are classified according to their physical, health, and environmental hazards. The hazards are communicated via specific labels and the Safety Data Sheet. GHS attempts to standardize hazard communication so that the intended audience (workers, consumers, transport workers and emergency responders) can better understand the hazards of the chemicals in use.

KACOL 6850 classification and labelling:

The substance is not classified for any harmful effects to human or the environment.

9. Conclusion

KALCOL 6850 is used under controlled conditions at industrial sites and found in various consumer, household and cosmetic products at low concentrations. The manufacturing and use of KALCOL 6850 does not pose a risk to humans or the environment if instructions in the Safety Data Sheet are followed.

10. Contact information within company

For further information on this substance or product safety summaries in general, please contact:

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Additional information can be found at the International Council of Chemical Associations portal, found at http://www.icca-chem.org/en/Home/ICCA-initiatives/global-product-strategy/.

11. Glossary

Acute toxicity Harmful effects after single exposure

Biodegradation Loss or transformation of a chemical by microorganisms

Bioaccumulation Accumulation of substances in the aquatic organisms

Carcinogenicity Effects causing cancer

Chronic toxicity Harmful effects after repeated exposures

GHS Global Harmonized System

Hazard Danger or causing damage to human health or environment

Mutagenicity Effect that changes genes

Reprotoxicity Combining teratogenicity, embryotoxicity and harmful effects on

fertility

Sensitising Allergenic

12. Date of issue

September 11 2013