

GLOBAL PRODUCT STRATEGY SAFETY SUMMARY

KALCOL 8655

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 8655

Chemical Name: Fatty alcohol C16 – C16

CAS Number: 67762-27-0

2. Uses and Applications

KALCOL 8655 is a long chain aliphatic alcohol which is used for the synthetic intermediate in an industrial setting. The substance is not sold to consumers and use is limited to workers in an industrial setting. Workers handling this substance should have the appropriate skills and training.

3. Physical/chemical properties

KALCOL 8655 has no identified physicochemical hazards.

Property	Value
Physical state	Solid
Colour	White

Odour	Slight, Characteristic (alcohol)
pH	9.27 (5% ethanol solution)
Density	0.8071 g/ml at 58°C
Viscosity	No information available
Melting point	52.7°C (flow point)
Boiling point	No information available
Flash point	178°C (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: Consumer exposure is very unlikely as KALCOL 8655 is manufactured and handled in industrial settings in closed systems (used as chemical intermediate). Consumers will not come into contact with harmful levels of KALCOL 8655 as use in consumer end-products is not foreseen.

Worker: The overall toxicity of KALCOL 8655 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 data, KALCOL 8655 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 8655 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 (Persistent, Bioaccumulative and Toxic / Very Persistent and Very Bioaccumulative)	Not considered to be PBT or vPvB.

6. Exposure potential

Human health

The exposure of consumer exposure to KALCOL 8655 is very unlikely as the substance is manufactured and handled in industrial settings in closed systems. 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 8655 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 8655 and related substances. Indirect exposure of humans via the environment is dominated by regional background.

Although fatty alcohol C16-C18 is broadly used for the consumer products in EU, the amount of exposure to the consumers of this fatty alcohol is to be a safe level. Since the direct amount of exposure is expected more than those of indirect exposure via environment, this background exposure is less relevant.

Environment

Losses to air of KALCOL 8655 in aqueous-based products are expected to be minimal. Releases to waste water may be assumed to be up to 100%, since 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 8655 classification and labelling:

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

9. Conclusion

KALCOL 8655 is used under controlled conditions at industrial sites. The manufacturing and use of KALCOL 8655 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

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