

GLOBAL PRODUCT STRATEGY SAFETY SUMMARY

KAO AKYPO RLM-45NV

This document is a high-level summary that provides usage of chemical substances and safety information to the general public. 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 manufacturers' instructions and warnings for their consumer products containing this substance.

1. Substance Identity

Brand Name: KAO AKYPO RLM-45NV

Chemical Name: Sodium polyoxyethylene (5) lauryl ether carboxylate (Main component)

CAS Number: 33939-64-9 (Main component)

2. Uses and Applications

KAO AKYPO RLM-45NV is an anionic surfactant. Because of its excellent water solubility and compatibility with other ingredients, it is mainly used in body-cleansing agents and other applications.

For industrial use, KAO AKYPO RLM-45NV is mainly used as aqueous cleaners, and other applications.

3. Physical/Chemical Properties

KAO AKYPO RLM-45NV has no identified physicochemical hazards.

Property	Value
Physical state	Liquid
Color	Light yellow, clear
Odor	Characteristic
pH	No information available

Density	1.022 g/mL (10 °C) (50 °F) 1.018 g/mL (20 °C) (68 °F)
Melting point	<20 °C (<68 °F)
Freezing point	No information available
Flash point	Not applicable
Flammability	No information available
Explosive properties	No information available
Self – ignition temperature	No information available
Vapour pressure	No information available
Water solubility	Soluble
Octanol-water partition coefficient (log K _{ow})	No information available
Viscosity	35 mPa.s (10 °C) (50 °F) 18 mPa.s (20 °C) (68 °F) 15 mPa.s (40 °C) (104 °F)

4. Human Health Safety Assessment

Consumer: There is no exposure to hazardous concentration levels of KAO AKYPO RLM-45NV.

Worker: Based on available data, repeated exposure associated with handling operations with KAO AKYPO RLM-45NV does not cause any toxic effects.

Effect Assessment	Result
Acute Toxicity oral/ dermal	No acute toxicity after oral/ dermal exposure in practical use The substance does not cause damage to any organs following single exposure
Irritation skin/ eye	Undiluted substance causes skin irritation Causes serious eye irritation
Sensitization	Based on the available data, unlikely to cause allergic skin reaction
Toxicity after repeated exposure	Unlikely to cause any toxic effects through prolonged or repeated exposure in practical use
Mutagenicity	Based on the available data, unlikely to cause genetic defects
Carcinogenicity	Based on the available data, unlikely to cause cancer
Toxicity for reproduction	Based on the available data, unlikely to be damaging to fertility or the unborn child

5. Environmental Safety Assessment

The test results with fish, aquatic invertebrates and algae suggest that KAO AKYPO RLM-45NV could cause toxicity to aquatic organisms. However, KAO AKYPO RLM-45NV is considered a low risk to the environment because it is readily biodegradable and does not persist in the environment. KAO AKYPO RLM-45NV does not bioaccumulate in the food chain.

Effect Assessment	Result
Aquatic Toxicity	Based on the available data, likely to cause toxicity to aquatic organism
Biodegradation	Readily biodegradable
PBT/ vPvB conclusion	Not persistent in the environment, not bioaccumulating in organisms and not toxic nor very persistent and very bioaccumulating

6. Exposure

Consumer

Consumers may come into contact with KAO AKIPO RLM-45NV through use of products such as body-cleansing products. However, the potential for harmful effects from KAO AKIPO RLM-45NV in these applications is considered low. When products are used as recommended, consumers should always read the product information and follow the label or instructions.

Worker

The exposure can occur either in KAO AKYPO RLM-45NV manufacturing facilities or in the various industrial facilities when KAO AKYPO RLM-45NV is used. Those workers in industrial operations during maintenance, sampling, testing, or other procedures could be exposed with KAO AKYPO RLM-45NV. Only qualified and trained workers handle the undiluted substance. The manufacturing facilities offer a thorough training program for employees and appropriate work processes, as well as safety equipment (goggles and gloves) in place to prevent an unnecessary exposure. Safety showers and eye-wash stations are accessible nearby. Workers are required to be trained in accordance with the safety measures in the Safety Data Sheet.

Environment

Since this substance is used extensively, it is discharged to wastewater treatment facilities from industrial sites such as manufacturing, preparation, handling, storage and use of the substance as well as from consumer households. However, the substance is readily biodegradable, so it is removed efficiently in wastewater treatment facilities. The substance is biologically degraded in the surface water and is rapidly removed even if trace amounts of the substance remain in wastewater. Hence, the chronic exposure to aquatic organisms of the substance is unlikely to occur. Furthermore, the substance does not accumulate by the food chain, and there is no concern to human health by the exposure of the substance through environmental pathway.

7. Risk management recommendations

Adequate ventilation should be provided when KAO AKYPO RLM-45NV is used in manufacturing facilities or in the various industrial facilities. Always use appropriate chemical-resistant gloves to protect your hands and skin and always wear eye protection equipment. Wash hands and skin after contact with the substance. Do not eat, drink or smoke where the

substance is handled, processed or stored. If this substance gets on your clothing, take off the contaminated clothes. When the substance attaches to skin (or hair), wash with a large amount of water and soap. If it causes your skin irritation, seek medical advice/attention. If the substance gets into your eyes, rinse your eyes thoroughly for several minutes. If you wear contact lenses, and can take them off easily, take them off and continue to rinse your eyes. If eye irritation persists, get medical advice/attention.

Waste water containing the substance must be passed wastewater treatment facilities in order to remove the substance. No specific measures are needed, because it is not expected to be released into the air.

8. Regulatory Information / Classification and Labelling

Under GHS classification chemical substances are classified in hazards for physical properties, human health and environment. The hazard information for industrial products are transmitted via specific labels and Safety Data Sheet. GHS offers the standardization for hazard communication. The subjects who could be assumed to be exposed to the substance, workers, consumers, transport workers, and emergency responders, can better understand the hazards of the chemicals in use through the transmission.

Labeling according to UN GHS

UN GHS is the basis for country specific GHS labeling.

KAO AKYPO RLM-45NV may be assigned to the following GHS classification.



Classification and Labeling Information

Skin Irrit. 2

Eye Dam. 2A

Aquatic Acute 2

Hazard Statements:

H315: Causes skin irritation

H319: Causes serious eye irritation

H401: Toxic to aquatic life

Signal Word

Caution

The laws of manufacturing, sale, transport, use and disposal are different among countries or areas. Details are referred to the Safety Data Sheet provided by the supplier.

9. Conclusion

Although KAO AKYPO RLM-45NV may cause acute toxicity to aquatic organisms, the overall risk to environmental organisms is low due to the rapid biodegradation of KAO AKYPO RLM-45NV. In the PBT/vPvB assessments for KAO AKYPO RLM-45NV, the substance is not PBT/vPvB. Contact with the undiluted KAO AKYPO RLM-45NV may cause irritation to the skin and serious irritation to the eyes. When handling the substance, workers should follow the standard safety measures and refer to the Safety Data Sheet. Consumers will usually not come into contact with the substance bulk and the substance is used diluted products, therefore, KAO AKYPO RLM-45NV is considered to have low concern for adverse effects on human health.

10. Contact information within company

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

Name	Kao Corporation, Global Chemical Business
Telephone number	+81-3-5630-7700
Fax number	+81-3-5630-7889
E-mail address	chemical@kao.co.jp

Additional information can be found at a chemical risk assessment support portal provided by the Japan Chemical Industry Associations, found at <https://jcia-bigdr.jp/jcia-bigdr/en/top>.

11. Glossary

Acute Toxicity	Adverse effects that result from a single exposure
Sensitization	Inducibility of allergy
Genotoxicity	Effects to induce gene mutations
Carcinogenicity	Action influence to cause a cancer
Toxicity for Reproduction	Adverse effects for teratogenicity, embryotoxicity, and reproductivity
Biodegradation	Biological degradation of a substance in environments
PBT (Persistent, Bioaccumulative and Toxic)	Substances that are environmentally persistent, bioaccumulative, and toxic
vPvB (Very Persistent and Very Bioaccumulative)	Substances with high persistence in the environment and high accumulation in ecology
GHS	Globally Harmonized System of Classification and Labelling of Chemicals

12. Date of issue

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