

## GPS Safety Summary

**Substance Name:**

**Esterol A**

### 1. General Statement

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Methyl esters of linear fatty acids, saturated and unsaturated, essentially in C18 (primarily oleate and linoleate) compose Esterol A. Easily biodegradable and non-toxic, with low viscosity and good oxidation resistance, Esterol A is an excellent unctuous agent and finds applications as fluxing agent in metalworking fluids, concrete mould release, lubricant additive in cutting oils, tanning agent... It therefore can be used in industrial and professional settings and and by consumers.

### 2. Chemical Identity

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**Name:** Fatty acids, C16-18 and C18-unsatd, Me esters  
**Brand names:** Esterol A  
**CAS number:** 67762-38-3  
**EC number:** 267-015-4

### 3. Use and applications

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Esterol A is used in a variety of industrial, professional and consumer applications in products such as: lubricants and lubricant additives, tanning agents, metal working fluids...

### 4. Physical / Chemical properties

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Esterol A is a oily liquid with the following physical/chemical properties:

Property	Value
Physical state	Liquid
Form	Oily
Colour	Light yellow
Odour	Slight
Density	0.8881 g/cm <sup>3</sup> at 20°C
Melting point	6.3°C at 1 atm
Boiling point	354.3 at 1 atm
Flash point - Flammability	173°C - Not flammable
Self-ignition temperature	261°C
Explosive / oxidizing properties	Not expected based on structure
Vapour pressure	3.6 hPa at 20°C
Water solubility	Insoluble at 20°C

Octanol-water partition coefficient (LogKow)	6.2 at 25°C
Viscosity	6.1 mPa*s at 20°C

## 5. Health Effects

Effect Assessment	Result
Acute Toxicity Oral / inhalation / dermal	<i>Oral:</i> Based on the available test data, not expected to cause significant effect after acute oral exposure. <i>Inhalation:</i> No data. <i>Dermal:</i> Based on data available on a similar substance, not expected to cause significant effect after acute dermal exposure.
Irritation / corrosion Skin / eye/ respiratory tract	Based on the available test data, slightly irritating to skin and eye but not classified.
Sensitisation	Based on the available test data, not expected to cause allergic skin reactions.
Toxicity after repeated exposure Oral / inhalation / dermal	Based on the available test data, not expected to cause adverse effects after repeated exposure.
Genotoxicity / Mutagenicity	Based on the available test data, not expected to cause adverse genetic effects.
Carcinogenicity	Based on the available test data on a similar substance, not expected to cause cancer under normal use conditions.
Reproductive / Developmental Toxicity	Based on the available test data, not expected to cause adverse effects on reproduction.

## 6. Environmental Effects

As acute toxicity tests performed on Esterol A have shown no effect up to the limit of solubility and as the substance was determined to be readily biodegradable, the risk for the water compartment is considered to be low. In addition, Esterol A is not bioaccumulable.

Effect Assessment	Result
Aquatic Toxicity	No effect up to the limit of solubility.

Fate and behaviour	Result
(Bio)degradation potential	Based on the available test data: readily biodegradable.
Bioaccumulation potential	Not bioaccumulable
PBT / vPvB conclusion	Not considered to be PBT or vPvB.

## 7. Exposure

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### 7.1 Human health

General population may come into contact with Esterol A as the substance is used in a wide variety of applications. However due to the low level of toxicity of Esterol A, this exposure does not pose a risk to the general population.

Worker exposure can occur in facilities manufacturing or using the substance. Esterol A has a low level of toxicity however whenever workers are exposed, during handling, loading, mixing, sampling or maintenance operations, they should follow the recommended safety measures in the extended Safety Data Sheet (e-SDS).

### 7.2 Environment

Based on its physico-chemical properties (poorly soluble in water, ready biodegradability, low volatility...), a distribution modelling has determined that the environmental compartment more involved is sediment, followed by water and soil in very low percentage. Atmosphere is almost absent.

As no toxicity was shown from acute toxicity test on aquatic organisms, the risk for the environment is considered to be low.

## 8. Risk Management recommendations

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Human health measures		
<b>Organizational</b>	Implement good basic standards of occupational hygiene. Ensure operatives are well informed of the hazards and trained to minimise exposures. Refer to the latest available extended safety data sheet (eSDS).	
<b>Engineering controls</b>	Should be handled in well ventilated areas. Provide appropriate local exhaust ventilation at points of emission. Ensure that eye- and handwash stations and safety showers are close to workstation locations.	
<b>Protection</b>	<b>Eye/Face protection:</b>	Safety glasses
	<b>Skin protection:</b>	Protective suit
	<b>Hand protection:</b>	Gloves (synthetic rubber, plastic materials)
	<b>Respiratory protection:</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
Environment protective measures		
On-site waste water treatment is required. Do not release into the environment. Do not let product enter drains. Dam up with inert material. Destroy absorbed product in accordance with local and national regulations.		

## 9. Regulatory Information / Classification and Labelling

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### 9.1 Regulatory Information

This substance has been registered under:

- EU Regulation EC 1907/2006 (REACH)

## 9.2 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 eSDS. 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. Substances registered for REACH are classified according CLP (EC) 1272/2008, implementation of the GHS in the European Union.

Classification	
According to REGULATION (EC) no 1272/2008:	
– Not classified	
Pictogram	
– None	
Hazard statement	
– None	

## 10. Contact Information within Company

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

- [arkema.reach-dpt1@arkema.com](mailto:arkema.reach-dpt1@arkema.com)
- **ICCA portal where the GPS Safety Summary is posted:**  
<http://www.icca-chem.org/en/Home/ICCA-initiatives/global-product-strategy/>

## 11. Date of Issues / Revision

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- Date of issue: 2013/03/11
- Date of revision:

## 12. Disclaimer

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