



SAFETY DATA SHEET

AKYPO ROX RLM 22

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	AKYPO ROX RLM 22
Product number	46446
Synonyms; trade names	AKYPO ROX RLM 22 RSPO MB
REACH registration number	01-2119487984-16-XXXX

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Chemical Intermediate Laboratory reagent. Cleaning agent.
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1.3. Details of the supplier of the safety data sheet

Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com
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1.4. Emergency telephone number

Emergency telephone	SGS - +32 (0)3 575 55 55 (24h)
Sds No.	46446

SECTION 2: Hazards identification

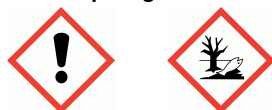
2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319
Environmental hazards	Aquatic Acute 1 - H400 Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms



Signal word	Warning
Hazard statements	H315 Causes skin irritation. H319 Causes serious eye irritation. H400 Very toxic to aquatic life. H412 Harmful to aquatic life with long lasting effects.

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Precautionary statements

P264 Wash contaminated skin thoroughly after handling.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P501 Dispose of contents/ container in accordance with local regulations.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.1. Substances

ALCOHOLS, C12-14, ETHOXYLATED			80 - 100%
CAS number: —	EC number: 500-213-3	REACH registration number: 01-2119487984-16-XXXX	
M factor (Acute) = 1			
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Aquatic Acute 1 - H400 Aquatic Chronic 3 - H412			

ALCOHOLS C12 - 14 (1 - 2.5 EO)			80 - 100%
CAS number: 68439-50-9	EC number: 500-213-3	REACH registration number: 01-2119487984-16-XXXX	
M factor (Acute) = 1			
Classification Aquatic Acute 1 - H400 Aquatic Chronic 3 - H412			

SODIUM HYDROXIDE			0 - 0.1%
CAS number: 1310-73-2	EC number: 215-185-5	REACH registration number: 01-2119457892-27-XXXX	
Classification Met. Corr. 1 - H290 Skin Corr. 1A - H314 Eye Dam. 1 - H318			

The full text for all hazard statements is displayed in Section 16.

Product name AKYPO ROX RLM 22

REACH registration number 01-2119487984-16-XXXX

Composition comments UVCB The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

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Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation. Get medical attention if symptoms are severe or persist. Place unconscious person on their side in the recovery position and ensure breathing can take place. Get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
Ingestion	Rinse mouth thoroughly with water. Remove any dentures. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Give plenty of water to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if symptoms are severe or persist. Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery position and ensure breathing can take place. Get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
Skin contact	After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing and clean shoes thoroughly before reuse.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes. Get medical attention.
Protection of first aiders	No action shall be taken without appropriate training or involving any personal risk. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact	Causes skin irritation. Overexposure may cause the following adverse effects: Irritation. Redness.
Eye contact	Causes serious eye irritation. Overexposure may cause the following adverse effects: Pain or irritation. Profuse watering of the eyes. Redness.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically. Contact specialist immediately poison treatment if large quantities have been ingested or inhaled
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up. Very toxic to aquatic life. Harmful to aquatic life with long lasting effects. Control run-off water by containing and keeping it out of sewers and watercourses. Fire-water run-off in sewers may create fire or explosion hazard. When heated and in case of fire, toxic vapours/gases may be formed.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Metal oxide(s). Oxides of the following substances: Carbon.

5.3. Advice for firefighters

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Protective actions during firefighting	No action shall be taken without appropriate training or involving any personal risk. Evacuate area.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. No action shall be taken without appropriate training or involving any personal risk. Evacuate area. Keep unnecessary and unprotected personnel away from the spillage. Do not touch or walk into spilled material. If ventilation is inadequate, suitable respiratory protection must be worn.
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6.2. Environmental precautions

Environmental precautions	Very toxic to aquatic life. Harmful to aquatic life with long lasting effects. Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Stop leak if safe to do so. Move containers from spillage area. Approach the spillage from upwind. Absorb spillage with inert, damp, non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.
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6.4. Reference to other sections

Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Avoid release to the environment. Container must be kept tightly closed when not in use. Avoid contact with acids. Product residues retained in emptied containers can be hazardous. Do not reuse empty containers.
Advice on general occupational hygiene	When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Good personal hygiene procedures should be implemented.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Protect from sunlight. Store away from incompatible materials (see Section 10). Keep away from food and drink. Avoid contact with acids. Container must be kept tightly closed when not in use. Keep containers upright. Only store in correctly labelled containers. Use appropriate containment to avoid environmental contamination.
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7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
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SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

SODIUM HYDROXIDE

Short-term exposure limit (15-minute): WEL 2 mg/m³

WEL = Workplace Exposure Limit.

Ingredient comments Observe any occupational exposure limits for the product or ingredients.

ALCOHOLS, C12-14, ETHOXYLATED

DNEL	Workers - Inhalation; Long term systemic effects: 294 mg/m ³ Workers - Dermal; Long term systemic effects: 2080 mg/kg/day Consumer - Inhalation; Long term systemic effects: 87 mg/m ³ Consumer - Dermal; Long term systemic effects: 1250 mg/kg/day Consumer - Oral; Long term systemic effects: 25 mg/kg/day
PNEC	Fresh water; 0.0437 mg/l marine water; 0.0437 mg/l STP; 10000 mg/l

ALCOHOLS C12 - 14 (1 - 2.5 EO) (CAS: 68439-50-9)

Ingredient comments	No exposure limits known for ingredient(s).
DNEL	Workers - Dermal; Long term systemic effects: 2080 mg/kg/day Workers - Inhalation; Long term systemic effects: 294 mg/m ³ Consumer - Oral; Long term systemic effects: 25 mg/kg Consumer - Dermal; Long term systemic effects: 1250 mg/kg/day Consumer - Inhalation; Long term systemic effects: 87 mg/m ³
PNEC	- Fresh water; 0.0437 mg/l - marine water; 0.0437 mg/l - Intermittent release; 0.004 mg/l - Sediment (Freshwater); 31 mg/kg/day - Sediment (Marinewater); 31 mg/kg/day

SODIUM HYDROXIDE (CAS: 1310-73-2)

DNEL	Consumer - Inhalation; Long term local effects: 1 mg/m ³ Workers - Dermal; Short term local effects: 2 mg/kg/day Workers - Inhalation; Short term local effects: 2 mg/m ³ Workers - Inhalation; Long term local effects: 1 mg/m ³
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8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

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Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.
Hand protection	The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The selected gloves should have a breakthrough time of at least 1 - 4 hours. Butyl rubber. Viton rubber (fluoro rubber). The selected gloves should have a breakthrough time of at least 0 - 1 hours. Neoprene. Nitrile rubber. To protect hands from chemicals, gloves should comply with European Standard EN374.
Other skin and body protection	Wear appropriate clothing to prevent reasonably probable skin contact.
Hygiene measures	When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Eye wash facilities and emergency shower must be available when handling this product.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. If ventilation is inadequate, suitable respiratory protection must be worn. EN 136/140/141/145/143/149
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Colourless to pale yellow.
Odour	Slight.
Odour threshold	No information available.
pH	pH (diluted solution): 12.0 - 13.5 (10%)
Melting point	4 - 7°C
Pour Point	No information available.
Freezing Point	No information available.
Initial boiling point and range	> 250°C
Flash point	164°C Cleveland open cup.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.

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Vapour pressure	No information available.
Vapour density	No information available.
Relative density	0.9 @ 20°C
Bulk density	No information available.
Solubility(ies)	Slightly soluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	235 - 245°C
Decomposition Temperature	>250°C
Viscosity	50 - 150 cP
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	No information available.

9.2. Other information

Other information	No information required.
Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No test data specifically related to reactivity available for this product or its ingredients.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Under normal conditions of storage and use, no hazardous reactions will occur.
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10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time. Static electricity and formation of sparks must be prevented.
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10.5. Incompatible materials

Materials to avoid	No information available.
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10.6. Hazardous decomposition products

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Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of the following substances: Carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) No information available.

Acute toxicity - dermal

Notes (dermal LD₅₀) No information available.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) No information available.

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation

Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion

May cause discomfort if swallowed.

Skin contact

Causes skin irritation. Overexposure may cause the following adverse effects: Irritation. Redness.

Eye contact

Causes serious eye irritation. Overexposure may cause the following adverse effects: Pain or irritation. Profuse watering of the eyes. Redness.

Toxicological information on ingredients.

ALCOHOLS, C12-14, ETHOXYLATED

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Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >2000 mg/kg, Oral,

ALCOHOLS C12 - 14 (1 - 2.5 EO)

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 2000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 2000 mg/kg, Dermal, Rat

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ (4h) > 5 mg/l, Inhalation, Dust/Mist, Rat

Skin corrosion/irritation

Skin corrosion/irritation Not irritating. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Not irritating. Rabbit

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

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Skin contact	Prolonged skin contact may cause temporary irritation.
Eye contact	May cause temporary eye irritation.

SODIUM HYDROXIDE

Acute toxicity - oral

Notes (oral LD₅₀)	LD ₅₀ >500 mg/kg, Oral, Rabbit
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Acute toxicity - dermal

Notes (dermal LD₅₀)	No specific test data are available.
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Acute toxicity - inhalation

Notes (inhalation LC₅₀)	No specific test data are available.
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Skin corrosion/irritation

Skin corrosion/irritation	Causes severe burns.
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Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye damage.
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Respiratory sensitisation

Respiratory sensitisation	No information available.
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Skin sensitisation

Skin sensitisation	No information available.
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Germ cell mutagenicity

Genotoxicity - in vitro	No information available.
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Carcinogenicity

Carcinogenicity	No information available.
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Reproductive toxicity

Reproductive toxicity - fertility	No information available.
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Specific target organ toxicity - single exposure

STOT - single exposure	No information available.
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Specific target organ toxicity - repeated exposure

STOT - repeated exposure	No information available.
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Aspiration hazard

Aspiration hazard	No information available.
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Inhalation	Dust is severely irritating to the upper respiratory system. Symptoms following overexposure may include the following: Coughing. Wheezing/breathing difficulties. May cause an asthma-like shortness of breath. Sore throat. Burning sensation in mouth. Upper respiratory irritation. Tracheobronchitis, pulmonary oedema.
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Ingestion	Causes severe burns. May cause burns in mucous membranes, throat, oesophagus and stomach. Symptoms following overexposure may include the following: Chemical burns. Burning sensation in mouth. Nausea, vomiting. Vomiting of blood. Swallowing concentrated chemical may cause severe internal injury.
Skin contact	Causes severe burns. Blistering may occur. May cause serious chemical burns to the skin. Prolonged contact causes serious tissue damage.
Eye contact	Causes serious eye damage. May cause chemical eye burns. Symptoms following overexposure may include the following: Severe irritation, burning and tearing. Corneal damage. May cause permanent damage if eye is not immediately irrigated.

SECTION 12: Ecological information

Ecotoxicity Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

ALCOHOLS C12 - 14 (1 - 2.5 EO)

Ecotoxicity Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

SODIUM HYDROXIDE

Ecotoxicity The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

12.1. Toxicity

Toxicity Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

ALCOHOLS, C12-14, ETHOXYLATED

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: 0.876 mg/l, Fish
OECD 203

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 0.39 mg/l, Daphnia magna
OECD 202

Acute toxicity - aquatic plants EC₅₀, 72 hours: 0.41 mg/l, Algae
OECD 201

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 72 hours: 0.31 mg/l, Algae
OECD 201

ALCOHOLS C12 - 14 (1 - 2.5 EO)

Toxicity Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

AKYPO ROX RLM 22

M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hours: 1.2 mg/l, Brachydanio rerio (Zebra Fish)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 0.53 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 0.41 mg/l, Pseudokirchneriella subcapitata OECD 201 NOEC, 72 day: 0.31 mg/l, Pseudokirchneriella subcapitata OECD 201
Acute toxicity - microorganisms	EC10, 16 hour: > 1000 mg/l, Pseudomonas putida
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - fish early life stage	NOEC, 10 days: 0.16 mg/l, Pimephales promelas (Fat-head Minnow)
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 0.77 mg/l, Daphnia magna

SODIUM HYDROXIDE

Toxicity	The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.
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Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 33-189 mg/l mg/l, Fish LC ₅₀ , 96 hour: 45.5 mg/l, Oncorhynchus mykiss (Rainbow trout) LC ₅₀ , 96 hour: 125 mg/l, Freshwater fish Gambusia affinis (Mosquito fish)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 40-240 mg/l mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The product is readily biodegradable.

Ecological information on ingredients.

ALCOHOLS, C12-14, ETHOXYLATED

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation > 70%: 28 days

ALCOHOLS C12 - 14 (1 - 2.5 EO)

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation 95%: 28 days OECD 301F

SODIUM HYDROXIDE

AKYPO ROX RLM 22

Persistence and degradability

The product contains only inorganic substances which are not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

ALCOHOLS, C12-14, ETHOXYLATED

Partition coefficient log Pow: 4.72

ALCOHOLS C12 - 14 (1 - 2.5 EO)

Bioaccumulative potential BCF: 12.7 - 237, Pimephales promelas (Fat-head Minnow)

Partition coefficient log Pow: 4.22 - 7.00

SODIUM HYDROXIDE

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient No information available.

12.4. Mobility in soil

Mobility Slightly soluble in water.

Ecological information on ingredients.

ALCOHOLS C12 - 14 (1 - 2.5 EO)

Mobility Slightly soluble in water.

SODIUM HYDROXIDE

Mobility The product is water-soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Ecological information on ingredients.

ALCOHOLS C12 - 14 (1 - 2.5 EO)

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

SODIUM HYDROXIDE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects No information available.

Ecological information on ingredients.

AKYPO ROX RLM 22**ALCOHOLS C12 - 14 (1 - 2.5 EO)**

Other adverse effects No information available.

SODIUM HYDROXIDE

Other adverse effects Not available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

General information Waste is classified as hazardous waste. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General Wear protective clothing as described in Section 8 of this safety data sheet.

14.1. UN number

UN No. (ADR/RID) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

UN No. (ADN) 3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS ALCOHOLS, C12-14, ETHOXYLATED, ALCOHOLS C12 - 14 (1 - 2.5 EO))

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS ALCOHOLS, C12-14, ETHOXYLATED, ALCOHOLS C12 - 14 (1 - 2.5 EO))

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS ALCOHOLS, C12-14, ETHOXYLATED, ALCOHOLS C12 - 14 (1 - 2.5 EO))

Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS ALCOHOLS, C12-14, ETHOXYLATED, ALCOHOLS C12 - 14 (1 - 2.5 EO))

14.3. Transport hazard class(es)

ADR/RID class 9

ADR/RID classification code M6

ADR/RID label 9

IMDG class 9

ICAO class/division 9

ADN class 9

Transport labels**14.4. Packing group**

AKYPO ROX RLM 22

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	•3Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(-)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015. This product may impact SEVESO storage regulations.
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Seveso Directive - Control of major accident hazards E1

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

Canada - DSL/NDL

All the ingredients are listed or exempt.
DSL

AKYPO ROX RLM 22

US - TSCA

All the ingredients are listed or exempt.

Australia - AICS

All the ingredients are listed or exempt.

Japan - ENCS

All the ingredients are listed or exempt.

Korea - KECI

All the ingredients are listed or exempt.

China - IECSC

All the ingredients are listed or exempt.

Philippines – PICCS

All the ingredients are listed or exempt.

New Zealand - NZIOC

All the ingredients are listed or exempt.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

Classification procedures according to Regulation (EC) 1272/2008

Skin Irrit. 2 - H315: On basis of test data. Eye Irrit. 2 - H319: On basis of test data. Aquatic Acute 1 - H400: Calculation method. Aquatic Chronic 3 - H412: Calculation method.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

22/03/2022

AKYPO ROX RLM 22

Version number	4.000
Supersedes date	10/08/2019
SDS number	46446
SDS status	Approved.
Hazard statements in full	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H400 Very toxic to aquatic life. H412 Harmful to aquatic life with long lasting effects.
Signature	Lisa Bland

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