



# Safety Data Sheet

according to Regulation (EC) no. 1907/2006 (REACH)

## ACTIOIL A230

Version number : GHS 5.0 / REACH-GHS

Date of compilation : 20.08.2019

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

<b>1.1 Product identifier</b>	ACTIOIL A230 ACTISUPER
<b>1.1.3 Registration number (REACH)</b>	not relevant (mixture)
<b>1.2.1 Relevant identified uses</b>	Gasoline Fuel Additive, petrochemical industry
<b>1.3 Details of the supplier of the safety data sheet</b>	
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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) N° 1272/2008 (CLP)

#### Categories of danger

GHS Chapter	Hazard class and category	Hazard statement code
3.2	skin corrosion/irritation Cat.2 (skin Irrit. 2)	H315
3.2	serious eye damage / eye irritation Cat.2 (Eye Irrit. 2)	H319
3.6	carcinogenicity Cat.2 (Carc. 2)	H351
3.8R	specific target organ toxicity-single exposure (respiratory tract irritation) Cat.3 (STOT SE 3)	H335
3.8D	specific target organ toxicity-single exposure (narcotic effects, drowsiness) Cat.3 (STOT SE 3)	H336
3.10	aspiration hazard Cat.1 (Asp. Tox. 1)	H304
4.1C	hazardous for the aquatic environment- (chronic hazard) Cat.2 (Aquatic Chronic 2)	H411

For full text of S-phrases: see SECTION 16.

#### Supplemental hazard information

Code	Supplemental hazard information
EUH66	repeated exposure may cause skin dryness or cracking

#### The most important adverse physico-chemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources. Spillage and fire water can cause pollution in water course.

#### 2.2 Label elements;

#### Labelling according to Directive 1999/45/EC (DPD)

Signal word: **Danger**

#### Pictograms:

GHS07, GHS08, GHS09



Hazard statements	Category/ies of danger
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer
H411	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Precautionary statements	Prevention
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P280	Water protective gloves/protective clothing/eye protection/fac protection
P281	Use personal protective equipment as required
Precautionary statements	Response
P301+P310	If swallowed immediatly call a poison center or doctor
P305+P351+P338	If in eye, rinse cautiously with water for several minutes. Remove contact lenses. Continue rinsing.
P312	Call a poison center/doctor if you feel unwell
P331	Do NOT induce vomiting
P391	Collect spillage
Precautionary statements	Storage
P403+P233	Store in a well ventilated place
Precautionary statements	Disposal
P501	Disposal of content / Container to industrial combustion plant
Additional labelling requirement	
EUH066	Repeated exposure may cause skin dryness or cracking
Hazardous ingredients for labelling:	naphtalene, cumene, 1,2,4-trimethylbenzene, solvent naphta (petroleum), heavy arom.
Other hazards	This material is combustible but will not ignite readily. Repeated exposure may cause dryness or crackin

## SECTION 3: Composition/information on ingredients

3.1 Substances not relevant (mixture)

3.2 Mixtures Description of the mixture

Name of substance	Identifier	wt%	Classification acc. to 1272/2008/EC	Pictograms
Solvent Naphta Petroleum light aromatics	No CE 265-199-0 CAS n° 64742-95-6 No d'enreg. REACH 01-2119463583-34	≥ 10 - ≤ 22	Flam. Liq. 3 / H301 Flam. Liq. 2 / H310 Flam. Liq. 1 / H330 Asp. Tox. 1 / H304 Aquatic Chronic 2 / H411	
1,2,4-trimethylbenzene	CAS No 95-63-6 EC N° 202-436-9 Index n° 649-356-00-4	≥ 2 - ≤ 6	Flam. Liq. 3 / H226 Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Skin Irrit. 2 / H335 Aquatic Chronic 2 / H411	
Solvent Naphta Petroleum heavy aromatics	CAS N° 64742-95-5 EC N° 265-198-5	≥ 12 - ≤ 36	STOT SE 3 / H336 Asp. Tox. 1/H304 Aquatic Chronic 2/H411	
2-ethylhexan-1-ol	CAS N° 104-76-7 EC N° 203-234-3	≥ 4 - ≤ 22	Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 /H335	
Naphtalene	CAS N° 91-20-3 EC N° 202-049-5 Index n° 601-052-00-2	≥ 0,4 - ≤ 3	Acute Tox. 4 / H302 Carc. 2 / H351 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	
Mesitylene	CAS N° 108-67-8	≥ 0,4 - ≤ 3	Flam. Liq. 3 / H226 STOT SE 3 /H335 Aquatic Chronic 2 / H411	
Methylcyclopentadienyl manganese tricarbonyl	CAS N° 12108-13-3 EC N° 235-166-5	≥ 0,4 - ≤ 3	Acute Tox. 3 / H301 Acute Tox. 2 / H310 Acute Tox. 1 / H330 Skin Corr. 2 / H315 Aquatic Chronic 2 / H411	

For full text of abbreviations: see SECTION 16.

## SECTION 4: First aid measures

## 4.1 Description of first aid measures

## General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything

## Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a doctor. Provide fresh air.

**Following skin contact:** Wash with plenty of soap and water.

**Following eye contact:** Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 mn, holding the eyelids apart.

**Following ingestion:** Rinse mouth with water (only if the person is conscious). DO NOT induce vomiting

**4.2 Most important symptoms and effects, both acute and delayed:** Narcotic effects.

**4.3 Indication of any immediate medical attention and special treatment needed:** None

### SECTION 5: Fire-fighting measures

#### 5.1 Extinguishing media

**Suitable extinguishing media** water spray, alcohol resistant foam, BC-powder, carbon dioxide (CO<sub>2</sub>)

**Unsuitable extinguishing media** water jet

#### 5.2 Special hazards arising from the substance or mixture

**Hazardous combustion products** nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>)

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow run-off from firefighting to enter drains or water courses. Collect contaminated fire fighting water separately. Fight fire with normal precautions from a reasonable distance.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel:** Remove persons to safety.

**For emergency responders:** Wear breathing apparatus if exposed to vapours/dusts/aerosols/gases.

**6.2 Environmental precautions:** Keeping away from drains, surface and ground water. Retain contaminated washing water and dispose it.

#### 6.3 Methods and material for containment and cleaning up

**Advices on how to contain a spill:** Covering of drains.

**Advices on how to clean up a spill:** Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage (sawdust, diatonic soil, sand, universalbinder).

**Appropriate containment techniques:** Use of adsorbent materials

**Other information relating to spills and releases:** Placing in appropriate containers for disposal. Ventilate affected area.

#### Reference to other sections

Hazardous combustion products: see section 5. Personal precautions: see section 8. Incompatible materials: see section 10.

Disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

##### Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

##### Advice on general occupational hygiene

Wash hands after use. Do not to eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal

#### 7.2 Conditions for safe storage, including any incompatibilities

##### Managing of associated risks

##### Incompatible substances or mixtures

Observe hints for combined storage

##### Consideration of other advice

**Packaging compatibilities:** Only packagings which are approved (e.g. acc. to ADR) may be used.

**7.3 Specific end use(s)** See section 16 for a general overview.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### National limit values

##### Occupational exposure limit values (Workplace Exposure Limits)

##### Relevant DNELs/DMELs/PNECs and other threshold levels

\* Relevant DNELs of components of the mixture, End point DNEL.

Name of substance	CAS No	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Solvent Naphta Petroleum (heavy arom)	64742-94-5	12,5 mg/kg	Human, dermal	Worker (industry)	chronic -systemic effect
Solvent Naphta Petroleum (heavy arom)	64742-94-5	151 mg/kg	human, inhalatory	Worker (industry)	chronic -systemic effect
2-EthyHexanol	104-76-7	53,2 mg/kg	human, inhalatory	Worker (industry)	acute, local effects
2-EthyHexanol	104-76-7	53,2 mg/kg	human, inhalatory	Worker (industry)	chronic, local effects
2-EthyHexanol	104-76-7	23 mg/kg	human, dermal	Worker (industry)	chronic -systemic effect
2-EthyHexanol	104-76-7	12,8 mg/kg	human, inhalatory	Worker (industry)	chronic -systemic effect
1,2,4-trimethylbenzene	95-63-6	100 m/m <sup>3</sup>	human, inhalatory	Worker (industry)	chronic, local effects
1,2,4-trimethylbenzene	95-63-6	16171 mg/kg	human, dermal	Worker (industry)	chronic -systemic effect

Name of substance	CAS No	Threshold level	Protection goal, route of exposure	Used in	Exposure time
1,2,4-trimethylbenzene	95-63-6	100 mg/m <sup>3</sup>	human, inhalatory	Worker (industry)	chronic -systemic effect
naphalene	91-20-3	25 mg/m <sup>3</sup>	human, dermal	Worker (industry)	chronic -systemic effect
naphalene	91-20-3	3,57 mg/kg	human, inhalatory	Worker (industry)	chronic -systemic effect
naphalene	91-20-3	25 mg/m <sup>3</sup>	human, inhalatory	Worker (industry)	chronic -systemic effect
mesithylene	108-67-8	100 mg/m <sup>3</sup>	human, inhalatory	Worker (industry)	acute, local effects
mesithylene	108-67-8	100 mg/m <sup>3</sup>	human, inhalatory	Worker (industry)	acute -systemic effect
mesithylene	108-67-8	100 mg/m <sup>3</sup>	human, inhalatory	Worker (industry)	chronic -systemic effect
mesithylene	108-67-8	16171 mg/kg	human, dermal	Worker (industry)	chronic -systemic effect
mesithylene	108-67-8	100 mg/m <sup>3</sup>	human, inhalatory	Worker (industry)	chronic -systemic effect
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	0,057 mg/kg	human, dermal	Worker (industry)	chronic -systemic effect
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	0,201 mg/m <sup>3</sup>	human, inhalatory	Worker (industry)	chronic -systemic effect

**\* Relevant PNECs of components of the mixture, Endpoint PNEC**

Name of substance	CAS No	Threshold level	Organism	Environmental compartment	Exposure time
2-EthyHexanol	104-76-7	0,017 mg/l	aquatic organismes	freshwater	short-term (single instance)
2-EthyHexanol	104-76-7	0,017 mg/l	aquatic organismes	marine water	short-term (single instance)
2-EthyHexanol	104-76-7	10 mg/l	microorganisms	sewage treatment plant (STP)	short-term (single instance)
2-EthyHexanol	104-76-7	0,284 mg/kg	benthic organisms	sediments	short-term (single instance)
2-EthyHexanol	104-76-7	0,0284 mg/kg	pelagic organism	sediments	short-term (single instance)
2-EthyHexanol	104-76-7	55 mg/kg	(top) predators	soil	short-term (single instance)
2-EthyHexanol	104-76-7	0,047 mg/kg	terrestrial organisms	water	continuous
2-EthyHexanol	104-76-7	0,17 mg/l	aquatic organismes	freshwater	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	0,12 mg/l	aquatic organismes	marine water	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	0,12 mg/l	aquatic organismes	sewage treatment plant (STP)	
1,2,4-trimethylbenzene	95-63-6	2,41 mg/l	microorganisms	sediments	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	13,56 mg/kg	benthic organisms	sediments	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	13,56 mg/kg	pelagic organism	soil	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	2,34 mg/kg	terrestrial organisms	water	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	0,12 mg/l	aquatic organismes	sewage treatment plant (STP)	continuous
naphalene	91-20-3	2,9 mg/l	microorganisms	freshwater	short-term (single instance)
mesithylene	108-67-8	0,101 mg/l	aquatic organismes	marine water	short-term (single instance)
mesithylene	108-67-8	0,101 mg/l	aquatic organismes	sewage treatment plant (STP)	short-term (single instance)
mesithylene	108-67-8	2,02 mg/l	microorganisms	sediments	short-term (single instance)
mesithylene	108-67-8	7,86 mg/kg	benthic organisms	sediments	short-term (single instance)
mesithylene	108-67-8	7,86 mg/kg	pelagic organism	soil	short-term (single instance)
mesithylene	108-67-8	1,34 mg/kg	terrestrial organisms	water	short-term (single instance)
mesithylene	108-67-8	0,101 mg/l	aquatic organismes	freshwater	continuous
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	0,21 µg/l	aquatic organismes	marine water	short-term (single instance)
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	0,021 µg/l	aquatic organismes	freshwater	short-term (single instance)
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	31,02 µg/l	terrestrial organisms	soil	short-term (single instance)
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	2,1 µg/l	aquatic organismes	water	continuous

## 8.2 Exposure controls

### Appropriate engineering controls

General ventilation

### Individual protection measures (personal protective equipment)

#### Eye/face protection

Wear eye/face protection.

#### Skin protection

##### \* Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

##### \* other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

#### Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keeping away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical state	liquid
Colour	different
Odour	typical

#### Other physical and chemical parameters

pH (value)	not determined
Melting point/freezing point	not determined
Initial boiling point and boiling range	164.7°C at 101,3 kPa
Flash point	> 62°C < 72°C
Evaporation rate	not determined
Flammability (solid, gas)	not relevant (fluid)
Explosive limits	
* lower explosion limit (LEL)	0.6 Vol%
* upper explosion limit (UEL)	7 Vol%
Vapour pressure	380 pa at 50°C
Density at 15°C	904 kg/m <sup>3</sup>
Solubility(ies)	not determined
Partition coefficient	
n-octanol/water (log KOW)	This information is not available.
Auto-ignition temperature	280°C
Kinetic Viscosity at 40°C	> 4cSt < 7cSt
Explosive properties	none
Oxidising properties	none

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

### 10.2 Chemical stability

See below "Conditions to avoid".

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided

### Physical stresses which might result in a hazardous situation and have to be avoided

strong shocks

### 10.5 Incompatible materials

There is no additional information.

### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### Classification according to GHS (1272/2008/EC/CLP)

#### Acute toxicity

Shall not be classified as acutely toxic.

**\* Acute toxicity of components of the mixture**

Name of the substance	CAS No	Exposure Route	ATE
2-Ethylhexanol	104-76-7	Inhalation: Vapour	11
1,2,4-trimethylbenzene	95-63-6	Inhalation: Vapour	11
Naphtalene	91-20-3	oral	710
Naphtalene	91-20-3	Inhalation: Vapour	>0,4
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	Inhalation: Vapour	100
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	dermal	196.7
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	Inhalation: Vapour	0.11

**Skin corrosion/irritation**

Cause skin irritation

**Serious eye damage/eye irritation**

Causes serious eye irritation

**Respiratory or skin sensitisation**

Shall not be classified as a respiratory or skin sensitiser.

**Summary of evaluation of the CMR properties:** Suspected of causing cancer. Shall not be classified as germ cell mutagenic nor as a reproductive toxicant.**\* Specific target organ toxicity - single exposure**

May cause respiratory irritation. May cause drowsiness or dizziness

**\* Specific target organ toxicity - repeated exposure**

Shall not be classified as a specific target organ toxicant (repeated exposure)

**Aspiration hazard**

May be fatal if swallowed and enters airways

**Other information**

Repeated exposure may cause skin dryness or cracking

**SECTION 12: Ecological information****12.1 Toxicity**

Toxic to aquatic life.

**Aquatic toxicity (acute) of components of the mixture**

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
2-Ethylhexanol	104-76-7	LC50	17,1 mg/l	fish	96 hours
2-Ethylhexanol	104-76-7	ErC50	16,6 mg/l	algae	72 hours
2-Ethylhexanol	104-76-7	EC50	39 mg/l	aquatic invertebrates	48 hours
1,2,4-trimethylbenzene	95-63-6	LC50	7,72 mg/l	fish	96 hours
1,2,4-trimethylbenzene	95-63-6	EC50	2,356 mg/l	algae	96 hours
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	LC50	0,21mg/l	fish	96 hours
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	ErC50	1,7mg/l	algae	48 hours
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	ErC50	0,41mg/l	algae	48 hours
mesithylene	108-67-8	LC50	16,17mg/l	fish	48 hours
mesithylene	108-67-8	EC50	25mg/l	algae	48 hours
naphalene	91-20-3	LC50	6,08mg/l	fish	96 hours
naphalene	91-20-3	EC50	2,16mg/l	aquatic invertebrates	48 hours

**Aquatic toxicity (chronic)**

May cause long-term adverse effects in the aquatic environment.

**Aquatic toxicity (chronic) of components of the mixture**

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
2-Ethylhexanol	104-76-7	EC50	27,4 mg/l	aquatic invertebrates	24 h
2-Ethylhexanol	104-76-7	LC50	20,57 mg/l	fish	24 h
mesithylene	108-67-8	EC50	50 mg/l	aquatic invertebrates	24 h
naphalene	91-20-3	EC50	7,76 mg/l	fish	24 h

**12.2 Process of degradability**

Data are not available

**Degradability of components of the mixture**

Name of substance	CAS No	Process	Degradation rate	Time
Solvent Naphta Petroleum	64742-94-5	oxygen depletion	2.44 %	4 d

**12.3 Bioaccumulative potential:** Data are not available**Information for each individual substance in the mixture which is listed in section 3**

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
2-Ethylhexanol	104-76-7		2.9	
1,2,4-trimethylbenzene	95-63-6	243	3.63	
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3		3.4	
mesithylene	108-67-8	161		
naphalene	91-20-3		3.4	

**12.4 Mobility in soil**

Data are not available.

**12.5 Results of PBT and vPvB assessment**

Data are not available.

**12.6 Other adverse effects**

Data are not available.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommended waste treatment option:** Solvent reclamation/regeneration**Special precaution for recommended waste treatment option:**

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

**Waste treatment of containers/packages**

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.



**13.2 Relevant provisions relating to waste:** not assigned**13.3 Remarks**

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.



**SECTION 14: Transport information**

<b>14.1 UN number</b>	<b>3082</b>
<b>14.2 UN proper shipping name</b>	<b>ENVIRONMENTAL HAZARDOUS SUBSTANCE, LIQUID, N.O.S</b>
<b>    Hasardous</b>	solvant naphta heavy arom.
<b>14.3 Transport hazard class(es)</b>	<b>9</b>
<b>14.4 Packing group</b>	III (substance presenting low danger)
<b>14.5 Environmental hazards</b>	hazardous for the aquatic environment
<b>14.6 Special precautions for user</b>	Provisions for dangerous goods (ADR) should be complied within the premises.
<b>14.7 Transport in bulk according to annex II of MARPOL 73/78 and the IBC Code:</b>	The cargo is not intended to be carried in bulk.

**14.8 Information for each of the UN Model Regulations****\* Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**



UN number	3082
Proper shipping name	ENVIRONMENTAL HAZARDOUS SUBSTANCE, LIQUID, N.O.S
Class	9
Classification code	M6
Packing group	III
Label (s)	9+ (fish and tree)
	 
Environmental hazards	Yes (hazardous to the aquatic environment)
Special provisions	274, 335, 375, 601
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category	3
Tunnel restriction code	E
Hazard identification No	90

**\* International Maritime Dangerous Goods Code (IMDG)**

UN number	3082
Proper shipping name	ENVIRONMENTAL HAZARDOUS SUBSTANCE, LIQUID, N.O.S
Class	9
Subsidiary risk(s)	-
Environmental hazards	Yes (hazardous to the aquatic environment)
Packing group	III
Label(s)	9+ fish and tree
	 

Special provisions (SP)	274, 335, 909
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-A, S-F
Stowage category	A

**\* International Civil Aviation Organization (ICAO-IATA/DGR)**

UN number	3082
Proper shipping name	ENVIRONMENTAL HAZARDOUS SUBSTANCE, LIQUID, N.O.S
Class	9
Environmental hazards	Yes (hazardous to the aquatic environment)
Danger labels:	9+ fish and tree
	 

Special provisions	A97, A158
Excepted quantities (EQ)	E1
Limited quantity	30 kg

## SECTION 15: Regulatory information

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

## Relevant provisions of the European Union (EU)

## \* Directive of industrial emission (VOCs, 2010/75/EU)

VOC Content 89,52%

## 15.2 Chemical Safety Assessment

Chemical Safety Assessment for this mixture were not be carried

## International Inventory Status

USA inventory (TSCA) : All components are listed or exempted.

Canada inventory : All components are listed or exempted.

Europe inventory : All components are listed or exempted.

Japan inventory (ENCS) : All components are listed or exempted.

Australia inventory (AICS) All components are listed or exempted.

Korea inventory (KECI) : All components are listed or exempted.

China inventory (IECSC) : All components are listed or exempted.

Philippines inventory All components are listed or exempted.

## SECTION 16: Other information

## Abbreviations and acronyms

Abr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
Asp. Tox.	Aspiration hazard
BCF	Bio Concentration Factor
BOD	Biochemical Oxygen Demand
Carc.	Carcinogenicity
CAS	Chemical Abstracts Service
COD	Chemical Oxygen Demand
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
DPD	Dangerous Preparations Directive (1999/45/EC)
EmS	Emergency Schedule
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
log KOW	N-octanol/water
N	Dangerous for the environment
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International carriage of Dangerous goods by Rail
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure
T	Toxic
T+	Very toxic
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Xi	Irritant
Xn	Harmful

## Key literature references and sources for data

Regulation (EC) No. 1907/2006 (REACH), amended by 453/2010/EU

Regulation (EC) No. 1272/2008 (CLP, EU GHS)

## Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards/environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).



**Relevant phrases (code and full text as stated in chapter 2 and 3)**

Code	Text
H226	flammable liquid and vapour
H301	toxic if swallowed
H302	harmful if swallowed
H304	may be fatal if swallowed and enters airways
H310	fatal in contact with skin
H315	causes skin irritation
H319	causes serious eye irritation
H330	fatal if inhaled
H332	harmful if inhaled
H335	may cause respiratory irritation
H336	may cause drowsiness or dizziness
H351	suspected of causing cancer
H372	cause damage to organs through prolonged or repeated exposure
H400	very toxic to aquatic life
H410	very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
H411	toxic to aquatic life with long lasting effects

**Classification according to Regulation (EC) N) 1272/2008 (CPL)**

2.6	Flam. Liq. 1	H226
3.10	Acute tox. 5	H303
3.11	Acute tox. 2	H330
3.2	Skin irrit. 2	H315
3.6	Carc. 2	H351
3.8R	STOT SE 3	H335
3.8D	STOT SE 3	H336
3.10	Asp. Tox. 1	H304
4.1A	Aquatic Acute 2	H401
4.1C	Aquatic Chronic 2	H411

**Disclaimer**

This information is based upon the present state of our knowledge. This SDS has been compiled and issolely intended for this product. This information and these recommendations are offered in good faith and believed to be correct as of the date hereof. Information and recommendations are supplied upon the condition that the recipients will make their own decision as to safety and suitability for their purposes. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose, or of any other nature, are made with respect to the product or the information and recommendations. Actioil makes no representation as to completeness or accuracy. In no event will Actioil be responsible for damages of any nature whatsoever resulting from the use or reliance upon the information