SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)



SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: FUEL SYSTEM CLEAN AUTO 12X0.300L

Product code: 104877

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

Engine degreaser

1.3. Details of the supplier of the safety data sheet

Registered company name: MOTUL

Address: 119, Boulevard Felix Faure. 93300 AUBERVILLIERS CEDEX FRANCE

Telephone: 33.1.48.11.70.00. Fax: 33.1.48.33.28.79.

Email: motul_hse@motul.fr

Registered company name (importer): High Performance Lubricants Ltd 21 O'Rorke Road, Penrose, Auckland 1061 PO Box 12 826 Penrose, Auckland, New Zealand 09 571 1366

1.4 24 HOUR EMERGENCY TEPLEPHONE NUMBER: 09 929 1483/0800 446 881 (toll free)

1.5 NATIONAL POISON LINE 0800 764 766

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Flammable liquid, Category 2 (Flam. Liq. 2, H225).

Acute inhalation toxicity, Category 4 (Acute Tox. 4, H332).

Skin irritation, Category 2 (Skin Irrit. 2, H315).

Eye irritation, Category 2 (Eye Irrit. 2, H319).

Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H336).

Aspiration hazard, Category 1 (Asp. Tox. 1, H304).

Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation

3.1B

6.1D

6.3A

6.4A

6.9B

6.1E

9.1C

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :





Signal Word:

DANGER Broduct identifiers

Product identifiers :

EC 200-661-7 PROPAN-2-OL EC MIXTURE KETONE

EC 919-857-5 HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS

EC 920-134-1 HYDROCARBONS, C9-C11, ISOALKANES, CYCLICS, <2% AROMATICS

Hazard statements:

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

Made under licence of European Label System, Software of INFODYNE (http://www.infodyne.fr)

Version 2.4 (08-07-2015) - Page 2/12

FUEL SYSTEM CLEAN AUTO 12X0.300L - 104877

H315 Causes skin irritation.
H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements - General:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

Precautionary statements - Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

FUEL SYSTEM CLEAN AUTO 12X0.300L - 104877

P262 Do not get in eyes, on skin, or on clothing.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

Precautionary statements - Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P331 Do NOT induce vomiting.

Precautionary statements - Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

Precautionary statements - Disposal:

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition:

Identification	(EC) 1272/2008	Note	%
CAS: 1330-20-7	GHS07, GHS02	[1]	25 <= x % < 50
EC: 215-535-7	Wng		
	Flam. Liq. 3, H226		
XYLÈNE	Acute Tox. 4, H312		
	Skin Irrit. 2, H315		
	Acute Tox. 4, H332		
CAS: 67-63-0	GHS07, GHS02	[1]	10 <= x % < 25
EC: 200-661-7	Dgr		
	Flam. Liq. 2, H225		
PROPAN-2-OL	Eye Irrit. 2, H319		
	STOT SE 3, H336		
CAS: MIXTURE	GHS07, GHS02		10 <= x % < 25
EC: MIXTURE	Dgr		
	Flam. Liq. 2, H225		
KETONE	Eye Irrit. 2, H319		
	STOT SE 3, H336		
	EUH:066		
EC: 919-857-5	GHS07, GHS08, GHS02		10 <= x % < 25
	Dgr		
HYDROCARBONS, C9-C11,	Flam. Liq. 3, H226		
N-ALKANES, ISOALKANES, CYCLICS,	Asp. Tox. 1, H304		
< 2% AROMATICS	STOT SE 3, H336		
	EUH:066		
EC: 920-134-1	GHS09, GHS07, GHS08, GHS02		2.5 <= x % < 10
	Dgr		
HYDROCARBONS, C9-C11,	Flam. Liq. 3, H226		
ISOALKANES, CYCLICS, <2%	Asp. Tox. 1, H304		
AROMATICS	STOT SE 3, H336		
	Aquatic Chronic 2, H411		
	EUH:066		
CAS: 37205-87-1	GHS09		2.5 <= x % < 10
PHENOL ETHOXYLATED	Aquatic Chronic 2, H411		
CAS: MIXTURE	GHS09		2.5 <= x % < 10
EC: MIXTURE	Aquatic Chronic 2, H411		2.5 <= X /0 < 10
LG. WILKTORE	Aquatic Cilionic 2, 11411		I

(POLYETHERAMINES) Information on ingredients:

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4: FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation:

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

Do not proceed with mouth-to-mouth or mouth-to-nose resuscitation. Use the appropriate equipment.

In the event of splashes or contact with eyes:

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin:

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing:

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

If swallowed accidentally, do not allow to drink, do not induce vomiting and transfer to hospital immediately by ambulance. Show the label to the doctor.

$\textbf{4.2. Most important symptoms and effects, both acute and } \ \ \textbf{delayed}$

No data available.

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

No data available.

SECTION 5: FIREFIGHTING MEASURES

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from $\,$ bursting.

Suitable methods of extinction

In the event of a fire, use:

- sprayed water or water mist
- water with AFFF (Aqueous Film Forming Foam) additive
- halon
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO2)

Prevent the effluent of fire-fighting measures from entering drains or waterways.

Unsuitable methods of extinction

In the event of a fire, do not use:

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed:

- carbon monoxide (CO)
- carbon dioxide (CO2)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

Spilled product may make surfaces slippery.

For non first aid worker

Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area.

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures

Use drums to dispose of collected waste in compliance with current regulations (see section 13).

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7: HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Remove contaminated clothing and protective equipment before entering eating areas.

Avoid contact with eyes.

Fire prevention :

Handle in well-ventilated areas.

Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Never inhale this mixture.

Prevent the accumulation of electrostatic charges with connections to earth.

The mixture can become electrostatically charged: always earth during decanting operations. Wear antistatic shoes and clothing and floors should be electrically conductive.

Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel.

Take precautionary measures against static discharges by bonding and grounding equipment.

No smoking.

Recommended equipment and procedures:

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid inhaling vapors.

Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.

Provide vapor extraction at the emission source and also general ventilation of the premises.

FUEL SYSTEM CLEAN AUTO 12X0.300L - 104877

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

Avoid skin and eye contact with this mixture.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

Never open the packages under pressure.

Do not breathe fumes, vapour, spray.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed and in a well-ventilated cool place.

Storage limit 60 months

Storage

Keep out of reach of children.

Keep away from food and drink, including those for animals.

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight.

Avoid accumulation of electrostatic charges.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area

VLE-ppm:

Notes:

Packaging

CAS

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

- European Union (2009/161/EU, 2006/15/EC, 2000/39/EC, 98/24/EC)

VMF-ppm ·

	J	1.1	J	T T					
1330-20-7	221	50	442	100	Peau				
- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010)									
CAS	TWA:	STEL:	Ceiling:	Definition :	Criteria :				
1330-20-7	100 ppm	150 ppm	-	-	-				
67-63-0	200 ppm	400 ppm	-	-	-				

VI F-mg/m3 ·

- Germany - AC	W (BAuA -	TRGS 900.	21/06/2010)	

VMF-mg/m3 ·

,	,	, ,		
CAS	VME :	VME :	Excess	Notes
1330-20-7	100 ml/m3	440 mg/m3	2(II)	DFG, H
67-63-0	200 ml/m3	500 mg/m3	2(II)	DFG, Y

- France (INRS - ED984:2008):

CAS	VME-ppm:	VME-mg/m3:	VLE-ppm:	VLE-mg/m3:	Notes:	TMP No:
1330-20-7	50	221	100	442	*	4 Bis, 84, *
67-63-0	-	-	400	980	-	84

- UK / WEL (Workplace exposure limits, EH40/2005, 2007) :

CAS	TWA:	STEL:	Ceiling :	Definition :	Criteria :
1330-20-7	50 ppm	100 ppm	-	-	-
67-63-0	400 ppm	500 ppm	-	-	-

- Ireland (Code of practice for the safety, Health and Welfare at Work, 2010) :

,	•	• •			
CAS	TWA:	STEL:	Ceiling :	Definition :	Criteria :
1330-20-7	50 ppm	100 ppm	-	-	-
67-63-0	400 ppm	500 ppm	-	-	-

- Netherlands / MAC-waarde (SER, 4 May 2010) :

· · · · · · · · · · · · · · · · · · ·								
CAS	TWA:	STEL:	Ceiling:	Definition :	Criteria:			
1330-20-7	210 mg/m3	442 mg/m3	-	-	-			
67-63-0	250 ppm	-	-	-	-			

- Finland (HTP-värden 2009) :

CAS	TWA:	STEL:	Ceiling :	Definition :	Criteria :
1330-20-7	50 ppm	100 ppm	-	-	-
67-63-0	200 ppm	250 ppm	-	-	-

- Denmark (2007):

CAS	TWA:	TWA:	Anm:		
1330-20-7	25 ppm	109 mg/m3	Н		

FUEL SYSTEM CLEAN AUTO 12X0.300L - 104877 200 ppm

- Belgium (Order of 19/05/2009, 2010) :								
CAS	TWA:	STEL:	Ceiling:	Definition :	Criteria:			
1330-20-7	50 ppm	100 ppm	-	-	-			
67-63-0	400 ppm	500 ppm	-	-	-			

- Norway (Veiledning om administrative normer for forurensning i arbeidsatmosfære, May 2007)

490 mg/m3

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria :
1330-20-7	25 ppm	-	-	-	-
67-63-0	100 ppm	-	-	-	-

- Poland (2009):

67-63-0

CAS	TWA:	STEL:	Ceiling:	Definition :	Criteria :
1330-20-7	100 mg/m3	350 mg/m3	-	-	-
67-63-0	900 mg/m3	1200 mg/m3	-	-	-

- Spain (Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT), Mayo 2010) :

CAS	TWA:	STEL:	Ceiling :	Definition :	Criteria :
1330-20-7	50 ppm	100 ppm	-	-	-
67-63-0	400 ppm	500 ppm	-	-	-

- Sweden (AFS 2007:2) :

CAS	TWA:	STEL:	Ceiling :	Definition :	Criteria :
1330-20-7	50 ppm	100 ppm	-	-	-
67-63-0	150 ppm	250 ppm	-	-	-

Czech Republic (Regulation No. 361/2007) :

CAS	TWA:	STEL:	Ceiling :	Definition :	Criteria :
1330-20-7	200 mg/m3	400 mg/m3	-	-	-
67-63-0	500 mg/m3	1000 mg/m3	-	-	-

Slovakia (Regulation No. 300/2007):

CAS	TWA:	STEL:	Ceiling :	Definition:	Criteria :
1330-20-7	50 ppm	221 mg/m3		442 mg/m3	
67-63-0	200 ppm	500 mg/m3	II1		

- Switzerland (SUVA 2009) :

CAS	VME-mg/m3:	VME-ppm:	VLE-mg/m3:	VLE-ppm:	Temps :	RSB:
1330-20-7	435	100	870	200	4x15	RB
67-63-0	500	200	1000	400	4x15	В

8.2. Exposure controls

Suitable technical inspections

Ensure adequate ventilation, if possible with extractor fans at work posts and appropriate general extraction.

Personnel shall wear regularly laundered overalls.

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE):









Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question: other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended:

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

FUEL SYSTEM CLEAN AUTO 12X0.300L - 104877

- PVA (Polyvinyl alcohol)

Recommended properties:

- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing:

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid breathing vapours.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387:

- A1 (Brown)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information:

Physical state :	Fluid liquid.
Color:	green
odor	caractéristique

Important health, safety and environmental information

pH:	Not relevant.
Boiling point/boiling range :	110 °C.
Flash Point :	-6.50 °C.
Explosive properties, lower explosivity limit (%):	0.6 vol
Explosive properties, upper explosivity limit (%):	12 vol
Vapour pressure (50°C) :	Not relevant.
Density:	<1
Water solubility:	Insoluble.
Viscosity:	v < 7 mm2/s (40°C)
Self-ignition temperature :	201 °C.
% VOC :	93

9.2. Other information

VOC (g/l):	765.4

No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid:

- accumulation of electrostatic charges.
- heating
- heat
- flames and hot surfaces

10.5. Incompatible materials

FUEL SYSTEM CLEAN AUTO 12X0.300L - 104877 10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO2)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness. Harmful by inhalation.

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

Splashes in the eyes may cause irritation and reversible damage

Narcotic effects may occur, such as drowsiness, narcosis, decreased alertness, loss of reflexes, lack of coordination or dizziness.

Effects may also occur in the form of violent headaches or nausea, judgement disorder, giddiness, irritability, fatigue or memory disturbance.

Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

11.1.1. Substances

Acute toxicity:

POLY(OXY(1,2-BUTANEDIYL)),ALPHA-(3-AMINOPROPYL)-GAMMA.-HYDROXY-C11-14-ISOALKYL ETHERS,C13-RICH (POLYETHERAMINES) (CAS

MIXTURE)

Oral route: LD50 > 5000 mg/kg

Species: Rat

Dermal route : LD50 > 2000 %@IDC_LA_DERMAL_UNITS

Species: Rabbit

PHENOL ETHOXYLATED (CAS: 37205-87-1)

Oral route : LD50 = 2000 mg/kg

Species: Rat

HYDROCARBONS, C9-C11, ISOALKANES, CYCLICS, <2% AROMATICS

Oral route : LD50 > 5000 mg/kg

Species: Rat

Dermal route: LD50 > 5000 mg/kg

Species : Rabbit

Inhalation route : LC50 > 5 %@IDC_LA_INHAL_UNITS

Species: Rat

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS

Oral route: LD50 > 5000 mg/kg

Species : Rat

Dermal route: LD50 > 5000 mg/kg

Species : Rabbit

Inhalation route: LC50 > 5 mg/l

Species : Rat

KETONE (CAS: MIXTURE)

Oral route: LD50 = 5800 mg/kg

Species: Rat

Dermal route : LD50 = 20000 mg/kg

Species: Rabbit

Inhalation route: LC50 %@IDC_LA_INHAL_QUANTIFIERS 76 %@IDC_LA_INHAL_UNITS

FUEL SYSTEM CLEAN AUTO 12X0.300L - 104877

PROPAN-2-OL (CAS: 67-63-0)

Oral route: LD50 = 5280 mg/kg

Species: Rat

Dermal route: LD50 = 3200 mg/kg

Species: Rabbit

Inhalation route : LC50 = 21.7 mg/l

Species: Rat

XYLÈNE (CAS: 1330-20-7)

Oral route: LD50 = 4300 mg/kg

Species : Rat

Dermal route : LD50 = 3200 mg/kg

Species: Rabbit

Inhalation route : LC50 = 21.7 %@IDC_LA_INHAL_UNITS

Species: Rat

11.1.2. Mixture

Acute toxicity:

Inhalation route (Dusts/mist): Harmful by inhalation.

Duration of exposure : 4 h LC50 = 3.926 mg/l

Skin corrosion/skin irritation:

Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties to the product

Serious damage to eyes/eye irritation :

eye irritation

Aspiration hazard :

May be fatal if swallowed and enters airways.

Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

$\label{thm:monograph:equation} \mbox{Monograph(s) from the IARC (International Agency for Research on Cancer)} \ :$

CAS 67-63-0 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

CAS 1330-20-7: IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans.

SECTION 12: ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.1. Substances

POLY(OXY(1,2-BUTANEDIYL)),ALPHA-(3-AMINOPROPYL)-GAMMA.-HYDROXY-C11-14-ISOALKYL ETHERS,C13-RICH (POLYETHERAMINES) (CAS

MIXTURE)

Fish toxicity: LC50 < 10 mg/l

Duration of exposure: 96 h

Algae toxicity: ECr50 < 100 mg/l

Duration of exposure: 72 h

 ${\tt HYDROCARBONS, C9-C11, ISOALKANES, CYCLICS, <2\% \ AROMATICS}$

Fish toxicity : LC50 > 1000 mg/l

Species : Oncorhynchus mykiss Duration of exposure : 96 h

Crustacean toxicity: EC50 > 1000 mg/l

Species : Daphnia magna Duration of exposure : 48 h

Algae toxicity: ECr50 > 1000 mg/l

Species : Pseudokirchnerella subcapitata

Duration of exposure: 72 h

PHENOL ETHOXYLATED (CAS: 37205-87-1)

Fish toxicity: 1 < LC50 <= 10 mg/l

Species : Brachydanio rerio Duration of exposure : 96 h

Algae toxicity: 1 < ECr50 <= 10 mg/l

Species : Scenedesmus subspicatus

Duration of exposure: 72 h

0,1 < ECx <= 1 mg/l Duration of exposure : 72 h

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS

Fish toxicity: LC50 > 1000 mg/l

Species : Oncorhynchus mykiss Duration of exposure : 96 h

Crustacean toxicity: EC50 = 1000 mg/l

Species : Daphnia magna Duration of exposure : 48 h

Algae toxicity: ECr50 > 1000 mg/l

Species: Pseudokirchnerella subcapitata

Duration of exposure: 72 h

KETONE (CAS: MIXTURE)

Fish toxicity: LC50 = 5540 mg/l

Species : Oncorhynchus mykiss Duration of exposure : 96 h

PROPAN-2-OL (CAS: 67-63-0)

Fish toxicity: LC50 = 9640 mg/l

Species : Pimephales promelas Duration of exposure : 96 h

Crustacean toxicity: EC50 = 13299 mg/l

Species : Daphnia magna Duration of exposure : 48 h

Algae toxicity: ECr50 = 1000 mg/l

Duration of exposure : 72 h

XYLÈNE (CAS: 1330-20-7)

Fish toxicity: LC50 = 26.7 mg/l

Species : Pimephales promelas Duration of exposure : 96 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

Not very mobile in soil.

The product is insoluble in water and will spread on the surface

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

Do not dispose of the product in the natural environment, effluents or surface waters.

German regulations concerning the classification of hazards for water (WGK) :

WGK 2 (VwVwS vom 27/07/2005, KBws): Hazardous for water.

SECTION 13: DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14: TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2015 - IMDG 2014 - ICAO/IATA 2015).

14.1. UN number

1993

14.2. UN proper shipping name

UN1993=FLAMMABLE LIQUID, N.O.S.

(propan-2-ol)

14.3. Transport hazard class(es)

- Classification :



3

14.4. Packing group

Ш

14.5. Environmental hazards

-

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	ldent.	LQ	Provis.	EQ	Cat.	Tunnel
	3	F1	II	3	33	1 L	274 601 640D	E2	2	D/E
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ			
	3	-	II	1 L	F-E,S-E	274	E2			
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ	
	3	-	II	353	5 L	364	60 L	A3	E2	
	3	-	II	Y341	1 L	-	-	A3	E2	

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

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

No data available.

SECTION 15: REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- Regulation EC 1272/2008 modified by regulation EC 618/2012

FUEL SYSTEM CLEAN AUTO 12X0.300L - 104877

- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.

- Container information:

Packaging to be fitted with child-resistant fastenings (see EC Regulation No. 1272/2008, Annex II, Part 3). Containers to be fitted with a tactile warning of danger (see EC Regulation No. 1272/2008, Annex II, Part 3).

- Particular provisions :

No data available.

- German regulations concerning the classification of hazards for water (WGK) :

WGK 2 (VwVwS vom 27/07/2005, KBws): Hazardous for water.

15.2. Chemical safety assessment

No data available.

15.3 This substance is to be managed using the conditions specified in an applicable Group Standard

HSR002583

SECTION 16: OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions. It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3:

• •	
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H312 + H332	Harmful in contact with skin or if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Abbreviations:

ADR: European agreement concerning the international carriage of dangerous goods by Road.

IMDG: International Maritime Dangerous Goods. IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation

RID: Regulations concerning the International carriage of Dangerous goods by rail.

WGK: Wassergefahrdungsklasse (Water Hazard Class).

GHS02: Flame

GHS07 : Exclamation mark GHS08 : Health hazard