Safety data sheet

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

1.1. Product identifier.

Code:	**M201**
Product name.	**Oily dielectric deoxidizer**
Chemical name and synonym.	**Protective oil**

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

Intended use. **Protective and degreaser for electrical contacts**

Identified Uses	Industrial.	Professional.	Consumer.
Industrial use	✔	-	-
Professional use	-	✔	-

1.3. Details of the supplier of the safety data sheet.

Name.	**Ambro-Sol s.r.l.**
Full address.	**Via per Pavone del Mella n.21**
District and Country.	**25020 Cigole (BS)** **Italia**
	Tel. +39 030 9959674
	Fax. +39 030 959265
e-mail address of the competent person.	
responsible for the Safety Data Sheet.	**quality@ambro-sol.com**

1.4. Emergency telephone number.

For urgent inquiries refer to. **CENTRO ANTIVELENI Ospedale Niguarda tel: +39 02 66101029**

SECTION 2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Aerosol, category 1	H222	Extremely flammable aerosol.
	H229	Pressurised container: may burst if heated.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Eye irritation, category 2	H319	Causes serious eye irritation.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.

2.2. Label elements.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

Signal words: Danger

Hazard statements:

H222	Extremely flammable aerosol.
H229	Pressurised container: may burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary statements:

P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P264	Wash . . . thoroughly after handling.
P280	Wear eye protection / face protection.
P304+P340	IF INHALED: remove person to fresh air and keep comfortable for breathing.
P410+P412	Protect from sunlight. Do no expose to temperatures exceeding 50°C / 122°F.

Contains:	Benzene, mono-C10-13-alkyl derivs., distn. residues Hydrocarbons, C11-C12, isoalkanes, <2% aromatics
	PROPAN-2-OL
	ACETONE

Statements on the aspiration toxicity classification were not included in the label elements, based on section 1.3.3. of Annex I to CLP.

2.3. Other hazards.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients.

3.1. Substances.

Information not relevant.

3.2. Mixtures.

Contains:
The full wording of hazard (H) phrases is given in section 16 of the sheet.

Identification.		**Classification 1272/2008 (CLP).**
ACETONE		
CAS. 67-64-1	31 ≤ x < 35	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
EC. 200-662-2		
INDEX. 606-001-00-8		
Reg. no. 01-2119471330-49-XXXX		
PROPANE		
CAS. 74-98-6	19 ≤ x < 23	Flam. Gas 1 H220, Note U

EC. 200-827-9

INDEX. 601-003-00-5

Reg. no. 01-2119486944-21-XXXX

PROPAN-2-OL

CAS. 67-63-0	15 ≤ x < 19	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336

EC. 200-661-7

INDEX. 603-117-00-0

Reg. no. 01-2119457558-25-XXXX

Benzene, mono-C10-13-alkyl derivs., distn. residues

CAS. 84961-70-6	11 ≤ x < 15	Asp. Tox. 1 H304

EC. 284-660-7

INDEX. -

Reg. no. 01-2119485843-26-XXXX

BUTANE

CAS. 106-97-8	9 ≤ x < 11	Flam. Gas 1 H220, Note C U

EC. 203-448-7

INDEX. 601-004-00-0

Reg. no. 01-2119474691-32-XXXX

Hydrocarbons, C11-C12, isoalkanes, <2% aromatics

CAS. -	5 ≤ x < 7	Flam. Liq. 3 H226, Asp. Tox. 1 H304

EC. 918-167-1

INDEX. -

Reg. no. 01-2119472146-39-XXXX

ETHYL ACETATE

CAS. 141-78-6	1 ≤ x < 3	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066

EC. 205-500-4

INDEX. 607-022-00-5

Reg. no. 01-2119475103-46-XXXX

BUTYLGLYCOL ACETATE

CAS. 112-07-2	0,5 ≤ x < 1	Acute Tox. 4 H312, Acute Tox. 4 H332

EC. 203-933-3

INDEX. 607-038-00-2

Reg. no. 01-2119475112-47-XXXX

The product is an aerosol containing propellants. For the purposes of calculation of the health hazards, propellants are not considered (unless they have health hazards). The percentages indicated are inclusive of the propellants.

Percentage of propellants: 30,99 %

SECTION 4. First aid measures.

4.1. Description of first aid measures.

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.
INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.
For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available.

SECTION 5. Firefighting measures.

5.1. Extinguishing media.

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. Do not breathe combustion products.

5.3. Advice for firefighters.

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. Send away individuals who are not suitably equipped. Wear protective gloves / protective clothing / eye protection / face protection.

6.2. Environmental precautions.

Do not disperse in the environment.

6.3. Methods and material for containment and cleaning up.

Use inert absorbent material to soak up leaked product. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage.

7.1. Precautions for safe handling.

Avoid bunching of electrostatic charges. Do not spray on flames or incandescent bodies. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Do not eat, drink or smoke during use. Do not breathe spray.

7.2. Conditions for safe storage, including any incompatibilities.

Store in a place where adequate ventilation is ensured, away from direct sunlight at a temperature below 50°C/122°F, away from any combustion sources.

7.3. Specific end use(s).

Information not available.

SECTION 8. Exposure controls/personal protection.

8.1. Control parameters.

Regulatory References:

DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GBR	United Kingdom	EH40/2005 Workplace exposure limits
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diaro da Republica I 26; 2012-02-06
EU	OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
	TLV-ACGIH	ACGIH 2016

ACETONE

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
AGW	DEU	1200	500	2400	1000
MAK	DEU	1200	500	2400	1000
VLA	ESP	1210	500		
VLEP	FRA	1210	500	2420	1000
WEL	GBR	1210	500	3620	1500
VLEP	ITA	1210	500		
NDS	POL	600		1800	
VLE	PRT	1210	500		
OEL	EU	1210	500		

TLV-ACGIH	1187	500	1781	750	

Predicted no-effect concentration - PNEC.

Normal value in fresh water	10,6	mg/l
Normal value in marine water	1,06	mg/l
Normal value for fresh water sediment	30,4	mg/kg
Normal value for marine water sediment	3,04	mg/kg
Normal value for water, intermittent release	21	mg/l
Normal value of STP microorganisms	29,5	mg/l
Normal value for the terrestrial compartment	0,112	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers. Acute local	Acute systemic	Chronic local	Chronic systemic	Effects on workers Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.			VND	62 mg/kg				
Inhalation.			VND	200 mg/m3	VND	2,420 mg/m3	VND	1,210 mg/m3
Skin.			VND	62 mg/kg			VND	186 mg/kg

PROPANE

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
AGW	DEU	1800	1000	7200	4000
MAK	DEU	1800	1000	7200	4000
NDS	POL	1800			
TLV-ACGIH			1000		

Predicted no-effect concentration - PNEC.

Normal value in fresh water	NPI
Normal value in marine water	NPI
Normal value for fresh water sediment	NPI
Normal value for marine water sediment	NPI
Normal value for water, intermittent release	NPI
Normal value of STP microorganisms	NPI
Normal value for the food chain (secondary poisoning)	NPI
Normal value for the terrestrial compartment	NPI
Normal value for the atmosphere	NPI

PROPAN-2-OL

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
AGW	DEU	500	200	1000	400
MAK	DEU	500	200	1000	400
VLA	ESP	500	200	1000	400
VLEP	FRA			980	400
WEL	GBR	999	400	1250	500
NDS	POL	900		1200	
TLV-ACGIH		492	200	983	400

Predicted no-effect concentration - PNEC.

Normal value in fresh water	140,9	mg/l
Normal value for fresh water sediment	552	mg/kg
Normal value for water, intermittent release	140,9	mg/l
Normal value of STP microorganisms	2251	mg/l
Normal value for the food chain (secondary poisoning)	160	mg/kg

Normal value for the terrestrial compartment	28	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers. Acute local	Acute systemic	Chronic local	Chronic systemic	Effects on workers Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.	VND	VND	VND	26 mg/kg	VND	VND	VND	VND
Inhalation.	VND	VND	VND	89 mg/m3	VND	VND	VND	500 mg/m3
Skin.	VND	VND	VND	319 mg/kg	VND	VND	VND	888 mg/kg

Benzene, mono-C10-13-alkyl derivs., distn. residues

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min			
		mg/m3	ppm	mg/m3	ppm		
TLV-ACGIH		57				INHAL.	

Predicted no-effect concentration - PNEC.

Normal value in fresh water	0,000075	mg/l
Normal value in marine water	0,0075	mg/l
Normal value for fresh water sediment	1761	mg/kg
Normal value for marine water sediment	1761	mg/kg
Normal value of STP microorganisms	2	mg/l

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers. Acute local	Acute systemic	Chronic local	Chronic systemic	Effects on workers Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.		NPI		230 µg/kg bw/day				
Inhalation.	NPI	NPI	NPI	1,6 mg/m³	NPI	NPI	NPI	3,2 mg/m³
Skin.	NPI	NPI	NPI	2,2 mg/kg bw/d	NPI	NPI	NPI	4,3 mg/kg bw/d

BUTANE

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
AGW	DEU	2400	1000	9600	4000
MAK	DEU	2400	1000	9600	4000
VLA	ESP		800		
VLEP	FRA	1900	800		
WEL	GBR	1450	600	1810	750
NDS	POL	1900		3000	
TLV-ACGIH				2377	1000

Predicted no-effect concentration - PNEC.

Normal value in fresh water	NPI
Normal value in marine water	NPI
Normal value for fresh water sediment	NPI
Normal value for marine water sediment	NPI

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers. Acute local	Acute systemic	Chronic local	Chronic systemic	Effects on workers Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.		NPI		NPI		NPI		NPI
Inhalation.		NPI		NPI		NPI		NPI
Skin.		NPI		NPI		NPI		NPI

ETHYL ACETATE

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
AGW	DEU	1500	400	3000	800
MAK	DEU	1500	400	3000	800
VLA	ESP	1460	400		
VLEP	FRA	1400	400		
WEL	GBR		200		400
NDS	POL	200		600	
TLV-ACGIH		1441	400		

Predicted no-effect concentration - PNEC.		
Normal value in fresh water	0,26	mg/l
Normal value in marine water	0,026	mg/l
Normal value for fresh water sediment	1,25	mg/kg
Normal value for marine water sediment	0,125	mg/kg
Normal value of STP microorganisms	650	mg/l
Normal value for the terrestrial compartment	0,24	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers.				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.			VND	4,5 mg/kg				
Inhalation.	734 mg/kg	734 mg/kg	367 mg/m3	367 mg/m3	1468 mg/m3	1468 mg/m3	734 mg/m3	734 mg/m3
Skin.			VND	37 mg/kg				63 mg/kg

BUTYLGLYCOL ACETATE

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	130	20	520	80	SKIN.
MAK	DEU	66	10	132	20	SKIN.
VLA	ESP	133	20	333	50	SKIN.
VLEP	FRA	66,5	10	333	50	SKIN.
WEL	GBR	133	20	332	50	SKIN.
VLEP	ITA	133	20	333	50	SKIN.
NDS	POL	100		300		
VLE	PRT	133	20	333	50	SKIN.
OEL	EU	133	20	333	50	SKIN.
TLV-ACGIH		131	20			

Predicted no-effect concentration - PNEC.		
Normal value in fresh water	304	µg/l
Normal value in marine water	30,4	µg/l
Normal value for fresh water sediment	2,03	mg/kg/d
Normal value for marine water sediment	203	µg/kg/d
Normal value of STP microorganisms	90	mg/l
Normal value for the food chain (secondary poisoning)	60	mg/kg
Normal value for the terrestrial compartment	415	µg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers.				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.		36 mg/kg bw/d		8,6 mg/kg bw/d				
Inhalation.		NPI	NPI		333 mg/m3	NPI	NPI	
Skin.	NPI	72 mg/kg bw/d	NPI	102 mg/kg bw/d	NPI	120 mg/kg bw/d	NPI	169 mg/kg bw/d

Legend:
(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.
VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION
None required.

SKIN PROTECTION
Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, a mask with a type AX filter combined with a type P filter should be worn (see standard EN 14387).
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance	aerosol
Colour	brown
Odour	characteristic of solvent
Odour threshold.	Not available.
pH.	Not available.
Melting point / freezing point.	Not available.
Initial boiling point.	Not available.
Boiling range.	Not available.
Flash point.	< 0 °C.
Evaporation Rate	Not available.
Flammability of solids and gases	Not available.
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	Not available.
Vapour density	Not available.
Relative density.	a 20°C 0,70 ÷ 0,74 g/ml
Solubility	insoluble in water
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	11 ÷ 24 cst (principio attivo)
Explosive properties	not applicable
Oxidising properties	not applicable

9.2. Other information.

Molecular weight.	55,448			
Total solids (250°C / 482°F)	0,82 %			
VOC (Directive 2010/75/EC) :	93,85 %	-	680,41	g/litre.
VOC (volatile carbon) :	64,52 %	-	467,78	g/litre.
Boiling point (solvent)	56 ° C			
Solvent	acetone			
Flash point (solvent)	- 17 °C			

SECTION 10. Stability and reactivity.

10.1. Reactivity.

There are no particular risks of reaction with other substances in normal conditions of use.

ETHYL ACETATE
Decomposes slowly into acetic acid and ethanol under the effect of light, air and water.

10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions.

No hazardous reactions are foreseeable in normal conditions of use and storage.

ACETONE
Risk of explosion on contact with: bromine trifluoride,fluorine dioxide,hydrogen peroxide,nitrosyl chloride,2-methyl-1,3 butadiene,nitromethane,nitrosyl perchlorate.May react dangerously with: potassium tert-butoxide,alkaline hydroxides,bromine,bromoform,isoprene,sodium,sulphur dioxide,chromium trioxide,chromyl chloride,nitric acid,chloroform,peroxymonosulphuric acid,phosphoryl oxychloride,chromosulphuric acid,fluorine,strong oxidising agents,strong reducing agents.Develops flammable gas on contact with: nitrosyl perchlorate.

ETHYL ACETATE
Risk of explosion on contact with: alkaline metals,hydrides,oleum.May react violently with: fluorine,strong oxidising agents,chlorosulphuric acid,potassium tert-butoxide.Forms explosive mixtures with: air.

10.4. Conditions to avoid.

Avoid overheating.

ACETONE
Avoid exposure to: sources of heat,naked flames.

ETHYL ACETATE
Avoid exposure to: light,sources of heat,naked flames.

10.5. Incompatible materials.

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

ACETONE
Incompatible with: acids,oxidising substances.

ETHYL ACETATE
Incompatible with: acids,bases,strong oxidants,aluminium,nitrates,chlorosulphuric acid.Incompatible materials: plastic materials.

10.6. Hazardous decomposition products.

ACETONE
May develop: ketenes,irritant substances.

SECTION 11. Toxicological information.

11.1. Information on toxicological effects.

ACUTE TOXICITY.

LC50 (Inhalation - vapours) of the mixture:Not classified (no significant component).
LC50 (Inhalation - mists / powders) of the mixture:Not classified (no significant component).
LD50 (Oral) of the mixture:Not classified (no significant component).
LD50 (Dermal) of the mixture:Not classified (no significant component).

PROPAN-2-OL
LD50 (Oral).4710 mg/kg Rat
LD50 (Dermal).12800 mg/kg Rat
LC50 (Inhalation).72,6 mg/l/4h Rat

ETHYL ACETATE
LD50 (Oral).11,3 rat
LD50 (Dermal).20000 rabbit

BUTYLGLYCOL ACETATE
LD50 (Oral).1880 rat
LD50 (Dermal).1500 rabbit
LC50 (Inhalation).400 rat

Benzene, mono-C10-13-alkyl derivs., distn. residues
LD50 (Oral).> 2000 mg/kg
LD50 (Dermal).> 2000 mg/kg

Hydrocarbons, C11-C12, isoalkanes, <2% aromatics
LD50 (Oral).10000 rat
LD50 (Dermal).2000 rat
LC50 (Inhalation).7,12 mg/l/4h rat

SKIN CORROSION / IRRITATION.
Does not meet the classification criteria for this hazard class.
SERIOUS EYE DAMAGE / IRRITATION.
Causes serious eye irritation.
RESPIRATORY OR SKIN SENSITISATION.
Does not meet the classification criteria for this hazard class.
GERM CELL MUTAGENICITY.
Does not meet the classification criteria for this hazard class.
CARCINOGENICITY.
Does not meet the classification criteria for this hazard class.
REPRODUCTIVE TOXICITY.
Does not meet the classification criteria for this hazard class.
STOT - SINGLE EXPOSURE.
May cause drowsiness or dizziness.
STOT - REPEATED EXPOSURE.
Does not meet the classification criteria for this hazard class.
ASPIRATION HAZARD.
Toxic for inhalation.

SECTION 12. Ecological information.

12.1. Toxicity.

ETHYL ACETATE	
LC50 - for Fish.	230 mg/l/96h
EC50 - for Algae / Aquatic Plants.	100 mg/l/72h
Chronic NOEC for Fish.	9,65 mg/l 32 days
Chronic NOEC for Crustacea.	2,4 mg/l 21 days
BUTYLGLYCOL ACETATE	
LC50 - for Fish.	30 mg/l/96h
EC50 - for Crustacea.	37 mg/l/48h
EC50 - for Algae / Aquatic Plants.	1045 mg/l/72h
EC10 for Crustacea.	30,4 mg/l 7 days
Benzene, mono-C10-13-alkyl derivs., distn. residues	
EC50 - for Crustacea.	1,4 mg/l/48h
Chronic NOEC for Crustacea.	7,5 21 days
Chronic NOEC for Algae / Aquatic Plants.	2,08 mg/l 72 h
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	
EC50 - for Algae / Aquatic Plants.	1

12.2. Persistence and degradability.

BUTANE	
Solubility in water.	0,1 - 100 mg/l

Rapidly biodegradable.

PROPANE	
Solubility in water.	0,1 - 100 mg/l

Rapidly biodegradable.

PROPAN-2-OL

Rapidly biodegradable.

ACETONE

Rapidly biodegradable.

ETHYL ACETATE	
Solubility in water.	> 10000 mg/l

Rapidly biodegradable.

BUTYLGLYCOL ACETATE

Rapidly biodegradable.

Benzene, mono-C10-13-alkyl derivs., distn. residues
NOT rapidly biodegradable.

Hydrocarbons, C11-C12, isoalkanes, <2% aromatics
Entirely biodegradable.

12.3. Bioaccumulative potential.

BUTANE

Partition coefficient: n-octanol/water.	1,09

PROPANE

Partition coefficient: n-octanol/water.	1,09

PROPAN-2-OL

Partition coefficient: n-octanol/water.	0,05

ACETONE

Partition coefficient: n-octanol/water.	-0,23
BCF.	3

ETHYL ACETATE

Partition coefficient: n-octanol/water.	0,68
BCF.	30

BUTYLGLYCOL ACETATE

Partition coefficient: n-octanol/water.	1,51

12.4. Mobility in soil.

Information not available.

12.5. Results of PBT and vPvB assessment.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects.

Information not available.

SECTION 13. Disposal considerations.

13.1. Waste treatment methods.

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information.

14.1. UN number.

ADR / RID, IMDG, IATA:	1950

14.2. UN proper shipping name.

ADR / RID:	AEROSOLS
IMDG:	AEROSOLS
IATA:	AEROSOLS, FLAMMABLE

14.3. Transport hazard class(es).

ADR / RID:	Class: 2	Label: 2.1
IMDG:	Class: 2	Label: 2.1
IATA:	Class: 2	Label: 2.1

14.4. Packing group.

ADR / RID, IMDG, IATA:	-

14.5. Environmental hazards.

ADR / RID:	NO
IMDG:	NO
IATA:	NO

14.6. Special precautions for user.

ADR / RID:	HIN - Kemler: --	Limited Quantities: 1 L	Tunnel restriction code: (D)
	Special Provision: -		
IMDG:	EMS: F-D, S-U	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 100 Kg	Packaging instructions: 130
	Pass.:	Maximum quantity: 25 Kg	Packaging instructions: 130
	Special Instructions:	A802	

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

Information not relevant.

SECTION 15. Regulatory information.

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

Seveso Category - Directive 2012/18/EC: P3a

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Product.

Point.	40

Contained substance.

Point.	52	DIISONONYL PHTHALATE Reg. no.: 01-2119430798-28-XXXX

Substances in Candidate List (Art. 59 REACH).

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisarion (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Gas 1	Flammable gas, category 1
Aerosol 1	Aerosol, category 1
Aerosol 3	Aerosol, category 3
Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
Eye Irrit. 2	Eye irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H229	Pressurised container: may burst if heated.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY
1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament

8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review:
The following sections were modified:
01 / 09.