Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Code: **V400CAR4 - V400CAR5 - V400CAR6 - V400CAR8 - V400CAR9 - V400CAR10 V400CAR11 V400CAR12 - V400CAR13 - V400CAR14 - V400CAR/FIN**

Product name **ENAMEL FINISHES BODYWORK AGRICULTURE LINE 400 ml AMBRO-SOL**

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

Intended use **Painting product for retouching in aerosol.**

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 di Pavia: 0382 24444 (IRCCS Fondazione Maugeri - Pavia)
Centro Antiveleni di Bergamo: 800 883300 (Ospedali Riuniti - Bergamo)
Centro Antiveleni di Firenze: 055 7947819 (Ospedale Careggi - Firenze)
Centro Antiveleni di Roma: 06 3054343 (Policlinico Gemelli - Roma)
Centro Antiveleni di Napoli: 081 7472870 (Ospedale Cardarelli - Napoli)
Centro de Información Toxicológica en España: 91 5620420 (Inst. Nacional de Toxicología y Ciencias Forenses)
Centre Antipoison en France: 01 40054848 (Centre Antipoison et de Toxicovigilance de Paris)
Pomorskie Centrum Toksykologii ul. Kartuska 4/6, 80-104 Gdańsk tel./fax: (58) 682 04 04
American Association of Poison Control Centers: +1 (800) 222-1222
Giftkontrollzentrum Berlin, Brandenburg 030 – 19 240

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 (EU) Regulation 2015/830.
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.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin 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.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
EUH208	Contains:, 12-hydroxy-N-[6-(12-hydroxyoctadecanamido)hexyl]octadecanamide, 2-butanone oxime May produce an allergic reaction.

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251	Do not pierce or burn, even after use.
P410+P412	Protect from sunlight. Do no expose to temperatures exceeding 50°C / 122°F.
P211	Do not spray on an open flame or other ignition source.
P102	Keep out of reach of children.
P261	Avoid breathing dust / fume / gas / mist / vapours / spray.

Contains: Acetone
N-butyl acetate

VOC (Directive 2004/42/EC) :

Special finishes.

VOC given in g/litre of product in a ready-to-use condition :	712,00
Limit value:	840,00

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

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
Dimethyl ether		
CAS 115-10-6	51 ≤ x < 55	Flam. Gas 1A H220, Press. Gas H280
EC 204-065-8		
INDEX 603-019-00-8		
Reg. no. 01-2119472128-37-XXXX		
Acetone		
CAS 67-64-1	15 ≤ x < 19	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		
N-butyl acetate		
CAS 123-86-4	15 ≤ x < 19	Flam. Liq. 3 H226, STOT SE 3 H336, EUH066
EC 204-658-1		
INDEX 607-025-00-1		
Reg. no. 01-2119485493-29-XXXX		
Xylene (mixture of isomers)		
CAS 1330-20-7	5 ≤ x < 7	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315, Classification note according to Annex VI to the CLP Regulation: C
EC 215-535-7		
INDEX 601-022-00-9		
Reg. no. 01-2119488216-32-XXXX		
2-methoxy-1-methylethyl acetate		
CAS 108-65-6	5 ≤ x < 7	Flam. Liq. 3 H226
EC 203-603-9		
INDEX 607-195-00-7		
Reg. no. 01-2119475791-29-XXXX		
Pigment R 122		
CAS 980-26-7	3 ≤ x < 5	Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335
EC 213-561-3		
INDEX -		
Cetrimonium chloride		
CAS 112-02-7	0 ≤ x < 0,5	Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Acute 1 H400 M=1
EC 203-928-6		
INDEX -		

Reg. no. 01-2119970558-23-XXXX		
2-butanone oxime		
CAS 96-29-7	0 ≤ x < 0,5	Carc. 2 H351, Acute Tox. 4 H312, Eye Dam. 1 H318, Skin Sens. 1 H317
EC 202-496-6		
INDEX 616-014-00-0		
Reg. no. 01-2119539477-28-XXXX		
12-hydroxy-N-[6-(12-hydroxyoctadecanamido)hexyl]octadecanamide		
CAS -	0 ≤ x < 0,5	Skin Sens. 1 H317, Aquatic Chronic 4 H413
EC 434-430-9		
INDEX -		

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

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: 51,00 %

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 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Specific information on symptoms and effects caused by the product are unknown.

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	TRGS 900 - Seite 1 von 69 (Fassung 29.03.2019)- Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
ESP	España	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition,published 2018)
ITA	Italia	DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017
POL	Polska	ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 r
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 - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018
EU	OEL EU	Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2019

Dimethyl ether

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
OEL	EU	1920	1000			

Predicted no-effect concentration - PNEC		
Normal value in fresh water	155	µg/l
Normal value in marine water	16	µg/l
Normal value for fresh water sediment	681	µg/kg/d
Normal value for marine water sediment	69	µg/kg/d
Normal value of STP microorganisms	160	mg/l
Normal value for the terrestrial compartment	45	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		NPI		NPI				
Inhalation		VND		471 mg/m3		VND		1894 mg/m3
Skin		NPI		NPI		NPI		NPI

Acetone

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	1200	500	2400 (C)	1000 (C)	
MAK	DEU	1200	500	2400	1000	
VLEP	FRA	1210	500	2420	1000	
WEL	GBR	1210	500	3620	1500	
VLEP	ITA	1210	500			
NDS/NDSCh	POL	600		1800		
VLE	PRT	1210	500			
OEL	EU	1210	500			
TLV-ACGIH			250		500	

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	100	mg/l
Normal value for the food chain (secondary poisoning)	29,5	mg/kg
Normal value for the terrestrial compartment	29,5	mg/kg/d
Normal value for the atmosphere	NPI	

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	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

N-butyl acetate

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	300	62	600 (C)	124 (C)	
VLA	ESP	724	150	965	200	
VLEP	FRA	710	150	940	200	
WEL	GBR	724	150	966	200	
NDS/NDSCh	POL	240		720		
TLV-ACGIH			50		150	

Predicted no-effect concentration - PNEC		
Normal value in fresh water	180	µg/l
Normal value in marine water	18	µg/l
Normal value for fresh water sediment	981	µg/kg/d
Normal value for marine water sediment	98,1	µg/kg/d
Normal value of STP microorganisms	35,6	mg/l
Normal value for the terrestrial compartment	90,3	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		2 mg/kg bw/d		2 mg/kg bw/d		2		2
Inhalation	300 mg/m3	300 mg/m3	35,7 mg/m3	12 mg/m3	600 mg/m3	600 mg/m3	300 mg/m3	48 mg/m3
Skin	NPI	6 mg/kg bw/d	NPI	3,4 mg/kg bw/d	NPI	11 mg/kg bw/d	NPI	7 mg/kg bw/d

Xylene (mixture of isomers)

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	440	100	880	200	SKIN
MAK	DEU	440	100	880	200	SKIN
VLA	ESP	221	50	442	100	SKIN
VLEP	FRA	221	50	442	100	SKIN
WEL	GBR	220	50	441	100	SKIN
VLEP	ITA	221	50	442	100	SKIN
NDS/NDSCh	POL	100		200		SKIN
VLE	PRT	221	50	442	100	SKIN
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH		434	100	651	150	

Predicted no-effect concentration - PNEC		
Normal value in fresh water	327	µg/l
Normal value in marine water	327	µg/l
Normal value for fresh water sediment	12,46	mg/kg/d
Normal value for marine water sediment	12,46	mg/kg/d
Normal value of STP microorganisms	6,58	mg/l
Normal value for the terrestrial compartment	2,31	mg/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				1,6 mg/kg bw/d				
Inhalation				14,8 mg/m3			289 mg/m3	77 mg/m3
Skin				108 mg/kg bw/d				180 mg/kg bw/d

2-methoxy-1-methylethyl acetate

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	270	50	270	50	
MAK	DEU	270	50	270	50	
VLA	ESP	275	50	550	100	SKIN
VLEP	FRA	275	50	550	100	SKIN
WEL	GBR	274	50	548	100	SKIN
VLEP	ITA	275	50	550	100	SKIN
NDS/NDSCh	POL	260		520		SKIN
VLE	PRT	275	50	550	100	SKIN
OEL	EU	275	50	550	100	SKIN

Predicted no-effect concentration - PNEC		
Normal value in fresh water	635	µg/l
Normal value in marine water	63,5	µg/l

Normal value for fresh water sediment	3,29	mg/kg/d
Normal value for marine water sediment	329	µg/kg/d
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	290	µg/kg soil dw

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		NPI		36 mg/kg bw/d				
Inhalation	NPI	NPI	33 mg/m3	33 mg/m3	550 mg/m3	NPI	NPI	275 mg/m3
Skin	NPI	NPI	NPI	320 mg/kg bw/d	NPI	NPI	NPI	796 mg/kg bw/d

Pigment R 122

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	5				Polvo-Humos, como Fe
VLEP	FRA	5				
WEL	GBR	4				RESP
WEL	GBR	10				INHAL
NDS/NDSCh	POL	5		10		INHAL
NDS/NDSCh	POL	2,5		5		RESP
TLV-ACGIH		5				

Cetrimonium chloride

Predicted no-effect concentration - PNEC		
Normal value in fresh water	680	ng/l
Normal value in marine water	68	ng/l
Normal value for fresh water sediment	9,27	mg/kg/d
Normal value for marine water sediment	927	µg/kg/d
Normal value of STP microorganisms	400	µg/l
Normal value for the terrestrial compartment	7	mg/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		VND		2,83 mg/kg bw/d				
Inhalation	NPI	NPI	NPI	980 µg/m3	NPI	NPI	NPI	3,32 mg/m3
Skin	VND	VND	VND	2,83 mg/kg bw/d	VND	VND	VND	4,7 mg/kg bw/d

2-butanone oxime

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	1	0,3	8	2,4	SKIN

Predicted no-effect concentration - PNEC		
Normal value in fresh water	256	µg/l
Normal value for water, intermittent release	118	µg/l
Normal value of STP microorganisms	177	mg/l

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
Inhalation			2 mg/m3	2,7 mg/m3			3,33 mg/m3	9 mg/m3
Skin		1,5 mg/kg bw/d		780 µg/kg bw/d		2,5 mg/kg bw/d		1,3 mg/kg bw/d

12-hydroxy-N-[6-(12-hydroxyoctadecanamido)hexyl]octadecanamide

Predicted no-effect concentration - PNEC		
Normal value in fresh water	24	ng/l
Normal value in marine water	2,4	ng/l
Normal value for fresh water sediment	1,032	mg/kg/d
Normal value for marine water sediment	103,2	µg/kg/d
Normal value of STP microorganisms	10	mg/l
Normal value for the food chain (secondary poisoning)	33,3	mg/kg
Normal value for the terrestrial compartment	206	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				1,67 mg/kg bw/d				
Inhalation								11,75 mg/m3
Skin								3,33 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.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
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 II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 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	various
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	flammable gas
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	0,73 ÷ 0,77 g/ml a 20°C
Solubility	insoluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Da 12`` a 15`` Coppa Ford
Explosive properties	Not available
Oxidising properties	Not available

9.2. Other information

VOC (Directive 2004/42/EC) : 94,95 % - 712,00 g/litre

SECTION 10. Stability and reactivity

10.1. Reactivity

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

N-butyl acetate

Decomposes on contact with: water.

2-methoxy-1-methylethyl acetate

Stable in normal conditions of use and storage.On contact with: strong oxidising agents.

With the air it may slowly develop peroxides that explode with an increase in temperature.

2-butanone oxime

Decomposes under the effect of heat.

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.

N-butyl acetate

Risk of explosion on contact with: strong oxidising agents.May react dangerously with: alkaline hydroxides,potassium tert-butoxide.Forms explosive mixtures with: air.

Xylene (mixture of isomers)

Stable in normal conditions of use and storage.Reacts violently with: strong oxidants,strong acids,nitric acid,perchlorates.May form explosive mixtures with: air.

2-methoxy-1-methylethyl acetate

May react violently with: oxidising substances,strong acids,alkaline metals.

2-butanone oxime

Reacts violently with: strong oxidising agents,acids.

Above the flash point (69°C/156°F), explosive mixtures can form with air.

10.4. Conditions to avoid

Avoid overheating.

Acetone

Avoid exposure to: sources of heat,naked flames.

N-butyl acetate

Avoid exposure to: moisture,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.

N-butyl acetate

Incompatible with: water,nitrates,strong oxidants,acids,alkalis,zinc.

2-methoxy-1-methylethyl acetate

Incompatible with: oxidising substances,strong acids,alkaline metals.

2-butanone oxime

Incompatible with: oxidising substances,strong acids.

10.6. Hazardous decomposition products

Acetone

May develop: ketenes,irritant substances.

2-butanone oxime

May develop: nitric oxide,carbon oxides.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the

criteria specified in the applicable regulation for classification.
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

2-methoxy-1-methylethyl acetate

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product.

Information on likely routes of exposure

N-butyl acetate

WORKERS: inhalation; contact with the skin.

Xylene (mixture of isomers)

WORKERS: inhalation; contact with the skin.
POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

2-methoxy-1-methylethyl acetate

WORKERS: inhalation; contact with the skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

N-butyl acetate

In humans, the substance's vapours cause irritation of the eyes and nose. In the event of repeated exposure, skin irritation, dermatitis (dryness and cracking of the skin) and keratitis appear.

Xylene (mixture of isomers)

Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

2-methoxy-1-methylethyl acetate

Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported (INCR, 2010).

Interactive effects

N-butyl acetate

A case of acute intoxication been reported involving a 33 year old worker while cleaning a tank with a preparation containing xylenes, butyl acetate and ethylene glycol acetate. The person had irritation of the conjunctiva and upper respiratory tract, drowsiness and motor coordination disorders, which disappeared within 5 hours. The symptoms are attributed to poisoning by mixed xylenes and butyl acetate, with a possible synergistic effect responsible for the neurological effects. Cases of vacuolar keratitis are reported in workers exposed to a mixture of butyl acetate and isobutanol vapours, but with uncertainty concerning the responsibility of a particular solvent (INRC, 2011).

Xylene (mixture of isomers)

Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:
> 20 mg/l
LD50 (Oral) of the mixture:
Not classified (no significant component)
LD50 (Dermal) of the mixture:
>2000 mg/kg

Dimethyl ether

LC50 (Inhalation) 164000 ppm rat

Xylene (mixture of isomers)

LD50 (Oral) > 3000 mg/kg rat

LD50 (Dermal) > 1700 mg/kg rabbit

LC50 (Inhalation) 5000 ppm/4h rat

2-methoxy-1-methylethyl acetate

LD50 (Oral) > 5000 mg/kg Rat

LD50 (Dermal) > 5000 mg/kg Rat

LC50 (Inhalation) 1805,05 ppm LC0 (4 h) rat

Acetone

LD50 (Oral) 5800 mg/kg bw

LD50 (Dermal) 7426 mg/kg bw guinea pig

LC50 (Inhalation) > 20 mg/l/4h air

N-butyl acetate

LD50 (Oral) > 10000 mg/kg Rat

LD50 (Dermal) > 5000 mg/kg rabbit

LC50 (Inhalation) 0,74 mg/l/4h Rat

2-butanone oxime

LD50 (Oral) > 900 mg/kg bw rat

LD50 (Dermal) 1000 mg/kg bw Rabbit

LC50 (Inhalation) 4,83 mg/l/4h rat

Cetrimonium chloride

LD50 (Oral) 655,5 mg/kg rat

LD50 (Dermal) 1164,6 mg/kg bw rabbit

12-hydroxy-N-[6-(12-hydroxyoctadecanamido)hexyl]octadecanamide

LD50 (Oral) 2000 mg/kg bw rat

LD50 (Dermal) 2000 mg/kg bw rat

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.Contains:12-hydroxy-N-[6-(12-hydroxyoctadecanamido)hexyl]octadecanamide
2-butanone oxime

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

Xylene (mixture of isomers)

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).

The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

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

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

No specific data are available for this product. Handle it according to good working practices. Avoid littering. Do not contaminate soil and waterways. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation. Please take all the proper measures to reduce harmful effects on aquifers.

12.1. Toxicity

Dimethyl ether	
LC50 - for Fish	> 4000 mg/l/96h Poecilia reticulata
EC50 - for Crustacea	> 4000 mg/l/48h Daphnia magna
Chronic NOEC for Fish	4,1 g/l 4 days
Chronic NOEC for Crustacea	4,4 g/l 48 h

Xylene (mixture of isomers)	
LC50 - for Fish	2,6 mg/l/96h
EC50 - for Algae / Aquatic Plants	4,6 mg/l/72h
EC10 for Crustacea	1,9 mg/l/21d
Chronic NOEC for Fish	1,3 mg/l 56 days
Chronic NOEC for Crustacea	960 µg/l 7 days
Chronic NOEC for Algae / Aquatic Plants	440 µg/l 73 h

2-methoxy-1-methylethyl acetate	
LC50 - for Fish	> 100 mg/l/96h
EC50 - for Crustacea	> 100 mg/l/48h
EC50 - for Algae / Aquatic Plants	> 100 mg/l/72h
Chronic NOEC for Fish	> 10 mg/l 14 days
Chronic NOEC for Crustacea	100 mg/l

Chronic NOEC for Algae / Aquatic Plants	1 g/l 4 days

Acetone

LC50 - for Fish	6,83 g/l
EC50 - for Crustacea	8,8 g/l/48h
Chronic NOEC for Crustacea	1,659 g/l 28 days

N-butyl acetate

LC50 - for Fish	18 mg/l/96h
EC50 - for Crustacea	32 mg/l/48h
EC50 - for Algae / Aquatic Plants	246 mg/l/72h
Chronic NOEC for Crustacea	23,2 mg/l 21 days
Chronic NOEC for Algae / Aquatic Plants	105 mg/l 72 h

2-butanone oxime

LC50 - for Fish	100 mg/l/96h
EC50 - for Crustacea	201 mg/l/48h
EC50 - for Algae / Aquatic Plants	8,94 mg/l/72h
Chronic NOEC for Fish	75 mg/l 14 days
Chronic NOEC for Crustacea	93 mg/l 48 h
Chronic NOEC for Algae / Aquatic Plants	1,79 mg/l 72 h

Cetrimonium chloride

LC50 - for Fish	390 µg/l/96h
EC50 - for Algae / Aquatic Plants	65 µg/l/72h
Chronic NOEC for Fish	32,2 µg/l 28 days
Chronic NOEC for Crustacea	80 µg/l
Chronic NOEC for Algae / Aquatic Plants	56,3 µg/l

12-hydroxy-N-[6-(12-hydroxyoctadecanamido)hexyl]octadecanamide

LC50 - for Fish	100 µg/l/96h
EC50 - for Crustacea	100 µg/l/48h
EC50 - for Algae / Aquatic Plants	100 µg/l/72h
Chronic NOEC for Fish	100 µg/l
Chronic NOEC for Crustacea	100 µg/l 48 h
Chronic NOEC for Algae / Aquatic Plants	100 µg/l 72 h

12.2. Persistence and degradability

2-methoxy-1-methylethyl acetate
Easily biodegradable. It is rapidly oxidized into the air by photochemical reaction.

Dimethyl ether

NOT rapidly degradable

Under test conditions no biodegradation observed (100%)

Pigment R 122

Solubility in water	< 0,001 mg/l

Degradability: information not available

Xylene (mixture of isomers)

Solubility in water	146 - 208 mg/L @ 25 °C and pH 7 mg/l

Rapidly degradable

2-methoxy-1-methylethyl acetate

Solubility in water	> 10000 mg/l

Rapidly degradable

Acetone

Rapidly degradable

N-butyl acetate

Solubility in water	5,3 g/l

Rapidly degradable

2-butanone oxime

Solubility in water	1000 - 10000 mg/l

Entirely degradable

Cetrimonium chloride

Rapidly degradable
100%

12-hydroxy-N-[6-(12-hydroxyoctadecanamido)hexyl]octadecanamide
Degradability: information not available

12.3. Bioaccumulative potential

Xylene (mixture of isomers)

Partition coefficient: n-octanol/water	3,12
BCF	25,9

2-methoxy-1-methylethyl acetate

Partition coefficient: n-octanol/water	1,2

Acetone

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

N-butyl acetate

Partition coefficient: n-octanol/water	2,3
BCF	15,3

2-butanone oxime

Partition coefficient: n-octanol/water	0,63
BCF	0,5

12.4. Mobility in soil

Xylene (mixture of isomers)

Partition coefficient: soil/water	2,73

N-butyl acetate

Partition coefficient: soil/water	< 3

2-butanone oxime

Partition coefficient: soil/water	0,55

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

Dimethyl ether
Given the high rate of disappearance of the solution, the product is unlikely to constitute a significant hazard to aquatic life. Destructive effect on ozone: 0.
Global warming potential (GWP): 1.

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.

Product residues are to be considered special hazardous waste.
Empty cans, even if completely emptied, must not be dispersed in the environment.
The aerosol container overheated to a temperature above 50Â ° C can burst even if it contains a small residue of gas.
Disposal must take place in an authorized place and in compliance with the laws in force.
Waste transportation can be subject to ADR.
European waste catalog number (contaminated containers):
Aerosol as domestic waste is excluded from the application of the aforementioned standard.

The used aerosol for professional / industrial use can be classified:
15.01.10 *: packaging containing residues of dangerous substances or contaminated by these substances.

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: 150 Kg	Packaging instructions: 203
	Pass.:	Maximum quantity: 75	Packaging instructions:

Special Instructions:	Kg A145, A167, A802	203

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

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 authorisation (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.

VOC (Directive 2004/42/EC) :

Special finishes.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

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

Flam. Gas 1A	Flammable gas, category 1A
Aerosol 1	Aerosol, category 1
Aerosol 3	Aerosol, category 3
Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Press. Gas	Pressurised gas
Carc. 2	Carcinogenicity, category 2
Acute Tox. 4	Acute toxicity, category 4
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Sens. 1	Skin sensitization, category 1
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 4	Hazardous to the aquatic environment, chronic toxicity, category 4
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.
H280	Contains gas under pressure; may burst if heated.
H351	Suspected of causing cancer.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H413	May cause long lasting harmful effects to aquatic life.
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

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5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
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16. Regulation (EU) 2019/521 (XII Atp. CLP)
- 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
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

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.
Product`s classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.
The data for evaluation of chemical-physical properties are reported in section 9.

Changes to previous review:
The following sections were modified:

08.