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

1.1 Product identifier

Trade name: CARROSS VERNIS ULTIMATE MAT

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

Identified use: professional use.

Application of the substance / the mixture Clear coating material, Varnish

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
CARROSS SAS
16 rue de Serrières
69540, Irigny, France
Tel +33 (0)1 60 27 20 19
contact@carross.eu

Further information obtainable from: contact@carross.eu

1.4 Emergency telephone number:

+33 (0)1 60 27 20 19 (8:30-18:00 du lundi au jeudi, 9:30-17 le vendredi)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

GHS02

Flam. Liq. 2	H225	Highly flammable liquid and vapour.

GHS08

STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.

GHS07

Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
STOT SE 3	H335-H336	May cause respiratory irritation. May cause drowsiness or dizziness.
Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS02 GHS07 GHS08

Signal word Danger

Hazard-determining components of labelling:
xylene
n-butyl acetate
hydrocarbons, C9, aromatics
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

(Contd. on page 2)

(Contd. of page 1)

4-morpholinecarbaldehyde

Hazard statements

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

Determination of endocrine-disrupting properties		
78-93-3	butanone	List II

* SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29	n-butyl acetate Flam. Liq. 3, H226; STOT SE 3, H336, EUH066	10-<20%
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32	xylene Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; Aquatic Chronic 3, H412	10-<20%
List no.: 918-668-5 Reg.nr.: 01-2119455851-35	hydrocarbons, C9, aromatics Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335-H336, EUH066	5-<10%
CAS: 108-65-6 EINECS: 203-603-9 Reg.nr.: 01-2119475791-29	2-methoxy-1-methylethyl acetate Flam. Liq. 3, H226; STOT SE 3, H336	5-7.5%
CAS: 78-93-3 EINECS: 201-159-0 Reg.nr.: 01-2119457290-43	butanone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	1-5%
CAS: 100-41-4 EINECS: 202-849-4 Reg.nr.: 01-2119489370-35	ethylbenzene Flam. Liq. 2, H225; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H332; Aquatic Chronic 3, H412	1-2.5%
CAS: 112-07-2 EINECS: 203-933-3 Reg.nr.: 01-2119475112-47	2-butoxyethyl acetate Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	1-5%

(Contd. on page 3)

(Contd. of page 2)

CAS: 4394-85-8 EINECS: 224-518-3 Reg.nr.: 01-2119987993-12	4-morpholinecarbaldehyde Skin Sens. 1B, H317	0.1-<1%
List no.: 915-687-0 Reg.nr.: 01-2119491304-40	Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate Repr. 2, H361f; Aquatic Acute 1, H400 (M=1); Aquatic Chronic 1, H410 (M=1); Skin Sens. 1A, H317	0.1-<0.5%
CAS: 112-34-5 EINECS: 203-961-6 Reg.nr.: 01-2119475104-44	2-(2-butoxyethoxy)ethanol Eye Irrit. 2, H319	0-<1%

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

In case of irregular breathing or respiratory arrest provide artificial respiration.

Immediately remove any clothing soiled by the product.

Take affected persons out of danger area and lay down.

After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

Can form explosive gas-air mixtures.

Formation of toxic gases is possible during heating or in case of fire.

Carbon monoxide and carbon dioxide

5.3 Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion gases.

Additional information

Cool endangered receptacles with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

(Contd. on page 4)

(Contd. of page 3)

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources.
Avoid contact with the eyes and skin.
6.2 Environmental precautions:
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Do not flush with water or aqueous cleansing agents.
Dispose of the material collected according to regulations.
6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
Do not eat, drink, smoke or sniff while working.
Do not allow to enter sewers/ surface or ground water.

Information about fire - and explosion protection:
Keep ignition sources away - Do not smoke.
Keep respiratory protective device available.
Fumes can combine with air to form an explosive mixture.

7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles:
Store in a cool location.
Store only in the original receptacle.
Information about storage in one common storage facility:
Store away from foodstuffs.
Store away from oxidising agents.
Further information about storage conditions:
Store in cool, dry conditions in well sealed receptacles.
Store receptacle in a well ventilated area.
7.3 Specific end use(s) No further relevant information available.

*

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:	
123-86-4 n-butyl acetate	
WEL (Great Britain)	Short-term value: 966 mg/m³, 200 ppm Long-term value: 724 mg/m³, 150 ppm
IOELV (EU)	Short-term value: 723 mg/m³, 150 ppm Long-term value: 241 mg/m³, 50 ppm

(Contd. on page 5)

(Contd. of page 4)

1330-20-7 xylene	
WEL (Great Britain)	Short-term value: 441 mg/m³, 100 ppm Long-term value: 220 mg/m³, 50 ppm Sk; BMGV
IOELV (EU)	Short-term value: 442 mg/m³, 100 ppm Long-term value: 221 mg/m³, 50 ppm Skin
108-65-6 2-methoxy-1-methylethyl acetate	
WEL (Great Britain)	Short-term value: 548 mg/m³, 100 ppm Long-term value: 274 mg/m³, 50 ppm Sk
IOELV (EU)	Short-term value: 550 mg/m³, 100 ppm Long-term value: 275 mg/m³, 50 ppm Skin
78-93-3 butanone	
WEL (Great Britain)	Short-term value: 899 mg/m³, 300 ppm Long-term value: 600 mg/m³, 200 ppm Sk, BMGV
IOELV (EU)	Short-term value: 900 mg/m³, 300 ppm Long-term value: 600 mg/m³, 200 ppm
100-41-4 ethylbenzene	
WEL (Great Britain)	Short-term value: 552 mg/m³, 125 ppm Long-term value: 441 mg/m³, 100 ppm Sk
IOELV (EU)	Short-term value: 884 mg/m³, 200 ppm Long-term value: 442 mg/m³, 100 ppm Skin
112-07-2 2-butoxyethyl acetate	
WEL (Great Britain)	Short-term value: 332 mg/m³, 50 ppm Long-term value: 133 mg/m³, 20 ppm Sk
IOELV (EU)	Short-term value: 333 mg/m³, 50 ppm Long-term value: 133 mg/m³, 20 ppm Skin
112-34-5 2-(2-butoxyethoxy)ethanol	
WEL (Great Britain)	Short-term value: 101.2 mg/m³, 15 ppm Long-term value: 67.5 mg/m³, 10 ppm
IOELV (EU)	Short-term value: 101.2 mg/m³, 15 ppm Long-term value: 67.5 mg/m³, 10 ppm

Regulatory information
WEL (Great Britain): EH40/2020
IOELV (EU): (EU) 2019/1831

DNELs		
123-86-4 n-butyl acetate		
Dermal	DNEL	7 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL	960 mg/m3 (acute - systemic effects, workers)
		960 mg/m3 (acute - local effects, workers)
		480 mg/m3 (long-term - systemic effects, workers)
		480 mg/m3 (long-term - local effects, workers)

(Contd. on page 6)

(Contd. of page 5)

1330-20-7 xylene		
Dermal	DNEL	212 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL	442 mg/m3 (acute - systemic effects, workers)
		442 mg/m3 (acute - local effects, workers)
		221 mg/m3 (long-term - systemic effects, workers)
		221 mg/m3 (long-term - local effects, workers)
hydrocarbons, C9, aromatics		
Dermal	DNEL	25 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL	150 mg/m3 (long-term - systemic effects, workers)
108-65-6 2-methoxy-1-methylethyl acetate		
Dermal	DNEL	153.5 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL	275 mg/m3 (long-term - systemic effects, workers)
78-93-3 butanone		
Dermal	DNEL	1,161 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL	600 mg/m3 (long-term - systemic effects, workers)
100-41-4 ethylbenzene		
Dermal	DNEL	180 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL	293 mg/m3 (acute - local effects, workers)
		77 mg/m3 (long-term - systemic effects, workers)
112-07-2 2-butoxyethyl acetate		
Dermal	DNEL	102 mg/kg bw/day (acute - systemic effects, workers)
		102 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL	775 mg/m3 (acute - systemic effects, workers)
		333 mg/m3 (acute - local effects, workers)
		133 mg/m3 (long-term - local effects, workers)
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate		
Dermal	DNEL	2.5 mg/kg bw/day (acute - systemic effects, workers)
		2.5 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL	2.35 mg/m3 (acute - systemic effects, workers)
		2.35 mg/m3 (long-term - systemic effects, workers)
112-34-5 2-(2-butoxyethoxy)ethanol		
Dermal	DNEL	83 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL	101.2 mg/m3 (acute - local effects, workers)
		67.5 mg/m3 (long-term - systemic effects, workers)
		67.5 mg/m3 (long-term - local effects, workers)

PNECs	
123-86-4 n-butyl acetate	
PNEC	0.18 mg/l (freshwater environment)
	0.018 mg/l (marine environment)
	0.36 mg/l (intermittent releases)
	35.6 mg/l (sewage treatment plants)
PNEC	0.981 mg/kg (freshwater sediment environment)
1330-20-7 xylene	
PNEC	0.327 mg/l (freshwater environment)

(Contd. on page 7)

(Contd. of page 6)

	0.327 mg/l (marine environment)
PNEC	12.46 mg/kg (freshwater sediment environment)
	12.46 mg/kg (marine sediment environment)
108-65-6 2-methoxy-1-methylethyl acetate	
PNEC	0.635 mg/l (freshwater environment)
	0.0635 mg/l (marine environment)
	6.35 mg/l (intermittent releases)
	100 mg/l (sewage treatment plants)
PNEC	3.29 mg/kg (freshwater sediment environment)
	0.329 mg/kg (marine sediment environment)
78-93-3 butanone	
PNEC	55.8 mg/l (freshwater environment)
	55.8 mg/l (marine environment)
	55.8 mg/l (intermittent releases)
	709 mg/l (sewage treatment plants)
PNEC	284.74 mg/kg (freshwater sediment environment)
	284.7 mg/kg (marine sediment environment)
	22.5 mg/kg (soil)
100-41-4 ethylbenzene	
PNEC	0.1 mg/l (freshwater environment)
	0.01 mg/l (marine environment)
	0.1 mg/l (intermittent releases)
	9.6 mg/l (sewage treatment plants)
PNEC	13.7 mg/kg (freshwater sediment environment)
	1.37 mg/kg (marine sediment environment)
	2.68 mg/kg (soil)
112-07-2 2-butoxyethyl acetate	
PNEC	0.304 mg/l (freshwater environment)
	0.0304 mg/l (marine environment)
	0.56 mg/l (intermittent releases)
	90 mg/l (sewage treatment plants)
PNEC	2.03 mg/kg (freshwater sediment environment)
	0.203 mg/kg (marine sediment environment)
	0.68 mg/kg (soil)
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	
PNEC	0.0022 mg/l (freshwater environment)
	0.00022 mg/l (marine environment)
	0.009 mg/l (intermittent releases)
PNEC	1.05 mg/kg (freshwater sediment environment)
	0.11 mg/kg (marine sediment environment)
	0.21 mg/kg (soil)
112-34-5 2-(2-butoxyethoxy)ethanol	
PNEC	1.1 mg/l (freshwater environment)
	0.11 mg/l (marine environment)

(Contd. on page 8)

(Contd. of page 7)

PNEC	11 mg/l (intermittent releases) 200 mg/l (sewage treatment plants) 4.4 mg/kg (freshwater sediment environment) 0.44 mg/kg (marine sediment environment) 0.32 mg/kg (soil)

Ingredients with biological limit values:	
1330-20-7 xylene	
BMGV (Great Britain)	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid
78-93-3 butanone	
BMGV (Great Britain)	70 µmol/L Medium: urine Sampling time: post shift Parameter: butan-2-one

Regulatory information BMGV (Great Britain): EH40/2011

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Appropriate engineering controls No further data; see section 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

Ensure good ventilation/exhaustion at the workplace.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Keep ignition sources away - Do not smoke.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
Do not eat or drink while working.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
A2/P2 filter (EN 14387)

Hand protection

Protective gloves

Check the permeability prior to each anewed use of the glove.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
When choosing protective gloves, the breakthrough time, rate of penetration and degradation (EN 374) should be taken into account.

Material of gloves

Butyl rubber, BR
Nitrile rubber, NBR
PVA gloves
Recommended material thickness: ≥ 0.7 mm
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 9)

(Contd. of page 8)

Penetration time of glove material
Permeation level and breakthrough time: level 6 ≥ 480 min.
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection

Tightly sealed goggles (EN 166 / EN 170)

Body protection: Protective work clothing (EN 14325)

* SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties	
General Information	
Physical state	Liquid
Colour:	Milky white, not transparent
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range	124-128 °C (123-86-4 n-butyl acetate)
Flammability	Highly flammable.
Lower and upper explosion limit	
Lower:	0.7 Vol %
Upper:	10.8 Vol %
Flash point:	<23 °C
Decomposition temperature:	Not determined.
pH	Not applicable.
Viscosity:	
Kinematic viscosity	>20.5 mm²/s
Dynamic at 20 °C:	288 mPas
Solubility	
water:	Not miscible or difficult to mix.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure at 20 °C:	8 hPa
Density and/or relative density	
Density:	0.98-1.015 g/cm³
Vapour density	Not determined.
9.2 Other information	
Appearance:	
Form:	Fluid
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Not determined.
Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Change in condition	
Evaporation rate	Not determined.
Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void

(Contd. on page 10)

(Contd. of page 9)

Gases under pressure	Void
Flammable liquids	Highly flammable liquid and vapour.
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity No decomposition if used according to specifications.
10.2 Chemical stability No decomposition if used and stored according to specifications.
10.3 Possibility of hazardous reactions
Reacts with alkali, amines and strong acids.
Reacts with oxidising agents.
Fumes can combine with air to form an explosive mixture.
10.4 Conditions to avoid Protect from heat and direct sunlight.
10.5 Incompatible materials: No further relevant information available.
10.6 Hazardous decomposition products:
Carbon monoxide and carbon dioxide
Formation of toxic gases is possible during heating or in case of fire.

*

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:		
123-86-4 n-butyl acetate		
Oral	LD50	10,760 mg/kg (rat)
Dermal	LD50	>14,000 mg/kg (rabbit)
Inhalative	LC50/4 h	23.4 mg/l (rat)
1330-20-7 xylene		
Dermal	LD50	1,100 mg/kg (ATE)
Inhalative	ATE	1.5 mg/l (dust/ mist)
hydrocarbons, C9, aromatics		
Oral	LD50	3,592 mg/kg (rat)
Dermal	LD50	>3,160 mg/kg
Inhalative	LC50/4 h	>6,193 mg/l (rat)
108-65-6 2-methoxy-1-methylethyl acetate		
Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/6 h	4,345 mg/l (rat)
78-93-3 butanone		
Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

(Contd. on page 11)

(Contd. of page 10)

100-41-4 ethylbenzene		
Oral	LD50	3,500 mg/kg (rat)
Dermal	LD50	17,800 mg/kg (rabbit)
Inhalative	ATE	1.5 ATE
112-07-2 2-butoxyethyl acetate		
Oral	LD50	1,880 mg/kg (rat)
Dermal	LD50	1,500 mg/kg (rabbit)
Inhalative	ATE	1.5 mg/l
4394-85-8 4-morpholinecarbaldehyde		
Oral	LD50	6,500 mg/kg (rat)
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate		
Oral	LD50	3,230 mg/kg (rat)
Dermal	LD50	>3,170 mg/kg (rat)
112-34-5 2-(2-butoxyethoxy)ethanol		
Oral	LD50	5,660 mg/kg (rat)
Dermal	LD50	4,000 mg/kg (rabbit)

Primary irritant effect:
Skin corrosion/irritation *Causes skin irritation.*
Serious eye damage/irritation *Causes serious eye irritation.*
Respiratory or skin sensitisation *May cause an allergic skin reaction.*
Germ cell mutagenicity *Based on available data, the classification criteria are not met.*
Carcinogenicity *Based on available data, the classification criteria are not met.*
Reproductive toxicity *Based on available data, the classification criteria are not met.*
STOT-single exposure *May cause respiratory irritation. May cause drowsiness or dizziness.*
STOT-repeated exposure *May cause damage to organs through prolonged or repeated exposure.*
Aspiration hazard *Based on available data, the classification criteria are not met.*

11.2 Information on other hazards

Endocrine disrupting properties		
78-93-3	butanone	List II

* SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:	
123-86-4 n-butyl acetate	
LC50/96 h	18 mg/l (fish)
TT/16 h	115 mg/l (microorganisms)
EC50/48 h	44 mg/l (daphnia)
EC50/72 h	675 mg/l (algae)
1330-20-7 xylene	
LC50/96 h	2.6 mg/l (Oncorhynchus mykiss) (OECD 203)
EC50/3 h	>157 mg/l (microorganisms)
EC50/48 h	>3.4 mg/l (Ceriodaphnia dubia) (OECD 202)
EC50/73h	2.2 mg/l (algae) (OECD 201)
hydrocarbons, C9, aromatics	
ErC50/96 h	9.2 mg/l (fish)
EL50/48 h	3.2 mg/l (Daphnia magna)

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(Contd. of page 11)

ErL50/72 h	2.9 mg/l (algae)
EC50/48 h	6.14 mg/l (Daphnia magna)
EC50/10 min	>99 mg/l (microorganisms)
108-65-6 2-methoxy-1-methylethyl acetate	
LC50/96 h	>100 mg/l (fish)
EC50/48 h	>500 mg/l (Daphnia magna)
EC20/30 min	>1,000 mg/l (microorganisms)
EC50/72 h	>1,000 mg/l (algae)
EC50	>100 mg/l (algae)
	>100 mg/l (fish)
	>100 mg/l (Daphnia magna)
78-93-3 butanone	
EC50/7 d	>100 mg/l (Desmodesmus subspicatus)
EC50/48 h	>100 mg/l (Leuciscus idus melanotus)
	>100 mg/l (Daphnia magna)
100-41-4 ethylbenzene	
EC50/48 h	2.4 mg/l (Daphnia magna)
EC20/30 min	200 mg/l (microorganisms)
EC50/24 h	13.4 mg/l (algae)
	7 mg/l (fish)
112-07-2 2-butoxyethyl acetate	
EC50/72 h	>100 mg/l (Scenedesmus subspicatus)
EC50/24 h	>100 mg/l (Daphnia magna)
LC50/48 h	10-100 mg/l (Leuciscus idus melanotus)
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	
LC50/96 h	0.97 mg/l (fish)
EC50/3 h	>100 mg/l (microorganisms)
EC50/72 h	1.68 mg/l (Desmodesmus subspicatus)
EC50/24 h	20 mg/l (Daphnia magna)
112-34-5 2-(2-butoxyethoxy)ethanol	
LC50/96 h	1,300 mg/l (fish)
TT/16 h	255 mg/l (microorganisms)
EC50/48 h	>100 mg/l (Daphnia magna)
EC50/72 h	1,101 mg/l (algae)

12.2 Persistence and degradability	
123-86-4 n-butyl acetate	
Biodegradation	83 % (readily biodegradable) (OECD 301 D, 28 d, aerobic)
1330-20-7 xylene	
Biodegradation	>60 % (readily biodegradable)
hydrocarbons, C9, aromatics	
Biodegradation	78 % (readily biodegradable) (OECD 301 F, 28 d, aerobic)
108-65-6 2-methoxy-1-methylethyl acetate	
Biodegradation	100 % (readily biodegradable) (OECD 302 B, 8 d, aerobic)

(Contd. on page 13)

(Contd. of page 12)

78-93-3 butanone	
Biodegradation	98 % (readily biodegradable) (OECD 301 D, 28 d)
100-41-4 ethylbenzene	
Biodegradation	100 % (readily biodegradable) (OECD 301 E, 6 d, aerobic)
112-07-2 2-butoxyethyl acetate	
Biodegradation	>70 % (readily biodegradable) (OECD 301C, 28d)
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	
Biodegradation	38 % (not readily biodegradable) (OECD 301 F, 28 d, aerobic)
112-34-5 2-(2-butoxyethoxy)ethanol	
Biodegradation	91.7 % (readily biodegradable) (OECD 301 B, 28 d, aerobic)

12.3 Bioaccumulative potential	
123-86-4 n-butyl acetate	
BCF	15.3 (-)
log Pow	2.3
1330-20-7 xylene	
BCF	25.9
log Kow	<3.2
108-65-6 2-methoxy-1-methylethyl acetate	
log Pow	0.56
78-93-3 butanone	
log Pow	0.3
100-41-4 ethylbenzene	
BCF	1
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	
BCF	<9.7

12.4 Mobility in soil	
123-86-4 n-butyl acetate	
log Koc	1.27
108-65-6 2-methoxy-1-methylethyl acetate	
Koc	1.7
100-41-4 ethylbenzene	
log Koc	2.41
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	
log Koc	5.31
Koc	204,400

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Endocrine disrupting properties For information on endocrine disrupting properties see section 11.

12.7 Other adverse effects

Additional ecological information:

General notes:

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

(Contd. on page 14)

(Contd. of page 13)

Harmful to aquatic organisms

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue	
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN number or ID number
ADR, IMDG, IATA UN1263

14.2 UN proper shipping name
ADR 1263 PAINT
IMDG, IATA PAINT

14.3 Transport hazard class(es)

ADR, IMDG, IATA

Class 3
Label 3

14.4 Packing group
ADR, IMDG, IATA II

14.5 Environmental hazards: Not applicable.
Marine pollutant (IMDG): No

14.6 Special precautions for user Warning: Flammable liquids.
Hazard identification number (Kemler code): 33
EMS Number: F-E,S-E
Stowage Category A

14.7 Maritime transport in bulk according to IMO instruments Not applicable.

Transport/Additional information:

ADR
Limited quantities (LQ) 5L
Transport category 2
Tunnel restriction code D/E

IMDG
Limited quantities (LQ) 5L

UN "Model Regulation": UN 1263 PAINT, 3, II

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SECTION 15: Regulatory information

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

(Contd. on page 15)

(Contd. of page 14)

Poisons Act

Regulated explosives precursors
None of the ingredients is listed.

Regulated poisons
None of the ingredients is listed.

Reportable explosives precursors
None of the ingredients is listed.

Reportable poisons
None of the ingredients is listed.

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.
Seveso category P5c FLAMMABLE LIQUIDS
Qualifying quantity (tonnes) for the application of lower-tier requirements 5.000 t
Qualifying quantity (tonnes) for the application of upper-tier requirements 50.000 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II
None of the ingredients is listed.

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))
None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS
None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors		
78-93-3	butanone	3

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors		
78-93-3	butanone	3

National regulations:

Information about limitation of use:
Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

The above information is based on currently available data characterising the product. They do not constitute a guarantee or quality specification. It should be regarded as a guideline for safe use, storage, transport, disposal in case of release into the environment. It is the responsibility of the user to create conditions for the safe use of the product and the user accepts responsibility for any consequences resulting from improper use of this product.

Relevant phrases

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.

(Contd. on page 16)

(Contd. of page 15)

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H361f Suspected of damaging fertility.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.

Classification according to Regulation (EC) No 1272/2008	
Flammable liquids	Bridging principles
Skin corrosion/irritation Serious eye damage/irritation Skin sensitisation Specific target organ toxicity (single exposure) Specific target organ toxicity (repeated exposure) Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

Version number of previous version: 6.0

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: chemical number assigned to the chemical in the Chemical Abstracts Service list
DNEL: Derived No-Effect Level
PNEC: Predicted No-Effect Concentration
LC50: median lethal concentration
LD50: lethal dose 50%
PBT: persistent, bioaccumulative and toxic
vPvB: very persistent and very bioaccumulative
ATE: Acute toxicity estimate values
Flam. Liq. 2: Flammable liquid substance. Hazard category 2
Flam. Liq. 3: Flammable liquid substance. Hazard category 3
Acute Tox. 4: Acute toxicity. Hazard category 4
Skin Irrit. 2: Skin corrosion/irritation. Hazard category 2
Eye Irrit. 2: Serious eye damage/eye irritation. Hazard category 2
Skin Sens. 1: Skin sensitisation. Hazard category 1
Skin Sens. 1A: Skin sensitisation. Hazard category 1A
Skin Sens. 1B: Skin sensitisation. Hazard category 1B
Repr. 2: Reproductive toxicity. Hazard category 2
STOT SE 3: Toxic effects on target organs - single exposure. Hazard category 3
STOT RE 2: Toxic effects on target organs - repeated exposure. Hazard category 2
Asp. Tox. 1: Aspiration hazard. Hazard category 1
Aquatic Acute 1: Presenting a hazard to the aquatic environment - acute hazard, Category 1
Aquatic Chronic 1: Presenting a hazard to the aquatic environment. Chronic hazard, Category 1
Aquatic Chronic 2: Presenting a hazard to the aquatic environment. Chronic hazard, Category 2
Aquatic Chronic 3: Presenting a hazard to the aquatic environment. Chronic hazard, Category 3

Sources European Chemicals Agency, http://echa.europa.eu/

*** Data compared to the previous version altered.**