Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 20.11.2024 Version 5 (replaces version 4) Revision: 20.11.2024

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

· **1.1 Product identifier**

· **Trade name: OTTO Primer 1227**
· **UFI:** XVW0-70PF-300D-3T26
· **Product category** PC9a Coatings and paints, thinners, paint removers
· **Application of the substance / the mixture** Priming

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Hermann Otto GmbH
Krankenhausstraße 14
D-83413 Fridolfing
Tel.: 0049/(0)8684/908-0
Fax.: 0049/(0)8684/908-1840

· **Further information obtainable from:**
Tel.: 0049- (0)8684- 908- 2363 (-4300)
E-Mail: alois.parzinger@otto-chemie.de
· **1.4 Emergency telephone number:**
Tel.: 0049- (0) 89- 192 40 (emergency telephone no.)
Tel.: 0049/621/60-43333 (BASF Plant fire brigade)
+44 1865 407333 (Carechem 24)

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**
Flam. Liq. 2 H225 Highly flammable liquid and vapour.
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H336 May cause drowsiness or dizziness.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the GB CLP regulation.
· **Hazard pictograms**

GHS02 GHS07

· **Signal word** Danger

· **Hazard-determining components of labelling:**
Reaction product of Hexamethylene diisocyanate, oligomers with Mercaptopropyltrimethoxysilane ethyl acetate
Aromatisches Polyisocyanat- Prepolymer
m-tolylidene diisocyanate
· **Hazard statements**
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.
· **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.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves / eye protection / face protection.

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P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P304+P312 IF INHALED: Call a POISON CENTER/doctor if you feel unwell.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

· **Additional information:**
EUH066 Repeated exposure may cause skin dryness or cracking.
· **Labelling of packages where the contents do not exceed 125 ml**
· **Hazard pictograms**

GHS02 GHS07

· **Signal word** Danger

· **Hazard-determining components of labelling:**
Reaction product of Hexamethylene diisocyanate, oligomers with Mercaptopropyltrimethoxysilane ethyl acetate
Aromatisches Polyisocyanat- Prepolymer
m-tolylidene diisocyanate
· **Hazard statements**
H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.
· **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.
P280 Wear protective gloves / eye protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P331 Do NOT induce vomiting.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Determination of endocrine-disrupting properties**
This product does not contain components that are endocrine disruptors according to UK REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% or more.

SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Solvent mixture with additives.
· **Dangerous components:**

CAS: 141-78-6 EINECS: 205-500-4 Reg.nr.: 01-2119475103-46	ethyl acetate Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	<50%
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	<25%

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CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29-0000	n-butyl acetate Flam. Liq. 3, H226; STOT SE 3, H336, EUH066	<10%
CAS: 192526-20-8 EC number: 924-669-1 Reg.nr.: 01-2120768758-32-0000	Reaction product of Hexamethylene diisocyanate, oligomers with Mercaptopropyltrimethoxysilane Skin Sens. 1A, H317; Aquatic Chronic 4, H413	<10%
CAS: 37273-56-6 EC number: 609-378-7	Aromatisches Polyisocyanat- Prepolymer Eye Irrit. 2, H319; Skin Sens. 1, H317	<5%
CAS: 108-65-6 EINECS: 203-603-9 Reg.nr.: 01-2119475791-29-0000	2-methoxy-1-methylethyl acetate Flam. Liq. 3, H226; STOT SE 3, H336	<2.5%
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32-0000	xylene (mix) 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	<2.5%
CAS: 26471-62-5 EINECS: 247-722-4	m-tolylidene diisocyanate Acute Tox. 2, H330; Resp. Sens. 1, H334; Carc. 2, H351; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335; Aquatic Chronic 3, H412, EUH204 Specific concentration limit: Resp. Sens. 1; H334: C ≥ 0.1 %	<0.1%

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

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SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· **After inhalation**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
· **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. Then consult a doctor.
· **After swallowing**
Do not induce vomiting; call for medical help immediately. Show container or label.
· **4.2 Most important symptoms and effects, both acute and delayed**
Allergic reactions
Headache
Dizziness
Dizziness
Nausea
· **4.3 Indication of any immediate medical attention and special treatment needed**
If swallowed or in case of vomiting, danger of entering the lungs

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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.
· **For safety reasons unsuitable extinguishing agents** Water with full jet.
· **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
· **5.3 Advice for firefighters**
· **Protective equipment:** Do not inhale explosion gases or combustion gases.
· **Additional information** Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Keep away from ignition sources
· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
· **6.4 Reference to other sections** See Section 8 for information on personal protection equipment.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
see item 8: Personal protective equipment
· **Information about fire - and explosion protection:**
Protect against electrostatic charges.
Traces of flammable substances may collect in the steam chamber of enclosed systems. Keep clear ofignition sources.
Highly volatile, flammable constituents are released during processing.
Flammable gas-air mixtures may form in empty receptacles.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage**
· **Requirements to be met by storerooms and receptacles:**
Provide solvent resistant, sealed floor.
Prevent any seepage into the ground.
· **Information about storage in one common storage facility:** Store away from foodstuffs.
· **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
Store receptacle in a well ventilated area.
· **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**
· **Ingredients with limit values that require monitoring at the workplace:**

141-78-6 ethyl acetate

WEL Short-term value: 1468 mg/m³, 400 ppm
Long-term value: 734 mg/m³, 200 ppm

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78-93-3 butanone

WEL Short-term value: 899 mg/m³, 300 ppm
Long-term value: 600 mg/m³, 200 ppm
Sk, BMGV

123-86-4 n-butyl acetate

WEL Short-term value: 966 mg/m³, 200 ppm
Long-term value: 724 mg/m³, 150 ppm

108-65-6 2-methoxy-1-methylethyl acetate

WEL Short-term value: 548 mg/m³, 100 ppm
Long-term value: 274 mg/m³, 50 ppm
Sk

26471-62-5 m-tolylidene diisocyanate

WEL Short-term value: 0.07 mg/m³
Long-term value: 0.02 mg/m³
Sen; as -NCO

· ***DNELs***

192526-20-8 Reaction product of Hexamethylene diisocyanate, oligomers with Mercaptopropyltrimethoxysilane

Dermal	Worker, systemic (long term)	4.7 mg/kg/Tag
Inhalative	Worker, systemic (long term)	1.7 mg/m3
	Consumer, systemic (long term)	0.3 nmg/m3

· ***Ingredients with biological limit values:***

78-93-3 butanone

BMGV 70 µmol/L
Medium: urine
Sampling time: post shift
Parameter: butan-2-one

· ***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***
The usual precautionary measures are to be adhered to when handling chemicals.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Pregnant women should strictly avoid inhalation or skin contact.
· ***Respiratory protection:***
Use suitable respiratory protective device when high concentrations are present.
· ***Hand protection*** Protective gloves.
· ***Material of gloves***
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.
Recommended glove material: Butyl rubber, BR
Recommended thickness of the material: >0,4 mm
· ***Penetration time of glove material*** Breakthrough time: 10 - 30 min
· ***Eye/face protection*** Tightly sealed goggles.
· ***Body protection:*** Protective work clothing.

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SECTION 9: Physical and chemical properties

· ***9.1 Information on basic physical and chemical properties***
· ***General Information***

· ***Physical state***	Fluid
· ***Colour:***	Colourless

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· **Odour:**	Ester-like
· **Melting point/freezing point:**	undetermined
· **Boiling point or initial boiling point and boiling range**	77 °C
· **Flammability**	Highly flammable.
· **Lower and upper explosion limit**	
· **Lower:**	2 Vol %
· **Upper:**	12 Vol %
· **Flash point:**	-8 °C (geschlossener Tiegel)
· **Auto-ignition temperature:**	333 °C
· **Decomposition temperature:**	Not determined.
· **pH at 20 °C**	7
· **Viscosity at 40 °C:**	>7 mm2/s
· **Solubility**	
· **Water:**	Not determined.
· **Partition coefficient n-octanol/water (log value)**	Not determined.
· **Vapour pressure at 20 °C:**	60 hPa
· **Density and/or relative density**	
· **Density at 20 °C:**	1 g/cm³
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Relative gas density**	undetermined
· **Particle characteristics**	undetermined

· **9.2 Other information**

· **Form:**	Fluid
· **Explosive properties:**	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Information with regard to physical hazard classes**

· **Aerosols**	Void
· **Flammable liquids**	Highly flammable liquid and vapour.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
Avoid strong heating.
· **10.3 Possibility of hazardous reactions**
Danger of receptacles bursting because of high vapour pressure when heated
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised
· **10.5 Incompatible materials:** Strong oxidizing agents, alkalis, amines, strong acides
· **10.6 Hazardous decomposition products:** see item 5.2

*
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:**

141-78-6 ethyl acetate

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)

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78-93-3 butanone
Oral LD50 2,193 mg/kg (rat) (OECD 423)
Dermal LD50 >8,100 mg/kg (rabbit)

123-86-4 n-butyl acetate
Oral LD50 >5,000 mg/kg (rat)
Dermal LD50 >5,000 mg/kg (rabbit)
Inhalative LC50/4 h >21.4 mg/l (rat)

192526-20-8 Reaction product of Hexamethylene diisocyanate, oligomers with Mercaptopropyltrimethoxysilane
Oral LD50 >2,000 mg/kg (rat)
Dermal LD50 >2,000 mg/kg (rat)

108-65-6 2-methoxy-1-methylethyl acetate
Oral LD50 8,500 mg/kg (rat)
Dermal LD50 >5,000 mg/kg (rabbit)
Inhalative LC50/4 h 35.7 mg/l (rat)

1330-20-7 xylene (mix)
Oral LD50 3,523 mg/kg (rat)
Dermal LD50 >4,200 mg/kg (rabbit)
Inhalative LC50/4 h 29.091 mg/l (rat)

· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
· **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 drowsiness or dizziness.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.
· **11.2 Information on other hazards**
· **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

· **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.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation** Liquid residues must be specially treated adhering to official regulations.

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· **Uncleaned packaging:**
· **Recommendation:**
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

· **14.1 UN number or ID number**
· **ADR, IMDG, IATA** UN1993
· **14.2 UN proper shipping name**
· **ADR** 1993 FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE, ETHYL METHYL KETONE (METHYL ETHYL KETONE))
· **IMDG, IATA** FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE, ETHYL METHYL KETONE (METHYL ETHYL KETONE))
· **14.3 Transport hazard class(es)**

· **ADR**

· **Class** 3 (F1) Flammable liquids.
· **Label** 3

· **IMDG, IATA**

· **Class** 3 Flammable liquids.
· **Label** 3
· **14.4 Packing group**
· **ADR, IMDG, IATA** II
· **14.5 Environmental hazards:**
· **Marine pollutant:** No
· **14.6 Special precautions for user** Warning: Flammable liquids.
· **Hazard identification number (Kemler code):** 33
· **EMS Number:** F-E,S-E
· **Stowage Category** B
· **14.7 Maritime transport in bulk according to IMO instruments** Not applicable.

· **Transport/Additional information:**

· **ADR**
· **Limited quantities (LQ)** 1L
· **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
· **Transport category** 2
· **Tunnel restriction code** D/E

· **IMDG**
· **Limited quantities (LQ)** 1L

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· **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":** UN 1993 FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE, ETHYL METHYL KETONE (METHYL ETHYL KETONE)), 3, II

*

SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **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**
· **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, 74
· **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.

· **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
· **Details of international registration status:**
Listed on or in accordance with the following inventories:
UK REACH - Europe listed
AICS - Australia listed
DSL- Canada listed
IECSC - China listed
ENCS - Japan not listed
NZIoC - New Zealand listed
PICCS - Philippines listed
ECL - Korea listed
TCSI - Taiwan listed

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TSCA - USA listed

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

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SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
This Safety Data Sheets is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· **Relevant phrases**
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.
EUH066 Repeated exposure may cause skin dryness or cracking.
EUH204 Contains isocyanates. May produce an allergic reaction.

· **Department issuing SDS:** Tel.: 0049- (0)8684- 908- 2363
· **Contact:** Tel.: 0049- (0)8684- 908- 2363 (-4300)
· **Date of previous version:** 19.09.2022
· **Version number of previous version:** 4
· **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 Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (UK REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 2: Acute toxicity – Category 2
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
Carc. 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3
Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4
· *** Data compared to the previous version altered.**