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

· ***1.1 Product identifier***

· ***Trade name:*** **Härter SKL 65**

· ***1.2 Relevant identified uses of the substance or mixture and uses advised against***
No further relevant information available.
· ***Application of the substance / the mixture***
Epoxy resin adhesive
Hardening agent/ Curing agent

· ***1.3 Details of the supplier of the safety data sheet***
· ***Manufacturer/Supplier:***
Spengler Fluorkunststoffe GmbH & Co. KG
Buchenring 20
D-42281 Wuppertal
Tel.: +49 202 8702790
Fax: +49 202 8702786
Website: www.sp-ptfe.de
e-Mail: info@sp-ptfe.de

· ***Informing department:***
Phone: +49 202 8702790
Fax.: +49 202 8702786

· ***1.4 Emergency telephone number:*** Phone +49 202 8702790

*

SECTION 2: Hazards identification

· ***2.1 Classification of the substance or mixture***
· ***Classification according to Regulation (EC) No 1272/2008***


GHS08 health hazard

Repr. 1B	H360F	May damage fertility.


GHS05 corrosion

Eye Dam. 1	H318	Causes serious eye damage.


GHS09 environment

Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.


GHS07

Skin Irrit. 2	H315	Causes skin irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.

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· ***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***

GHS05 GHS07 GHS08 GHS09

· ***Signal word*** Danger

· ***Hazard-determining components of labelling:***
Fettsäuren, C18-ungesättigt, Dimere, Polymere mit Ölsäure und Triethylentetramin
2,2'-iminodiethylamine
bisphenol A
N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine
Amines, polyethylenepoly-, triethylenetetramine fraction
· ***Hazard statements***
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H360F May damage fertility.
H411 Toxic to aquatic life with long lasting effects.
· ***Precautionary statements***

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P401	Store in accordance with local/regional/national/international regulations.
P501	Dispose of contents/container in accordance with local / regional / national / international regulations.

· ***Additional information:***
Restricted to professional users.
· ***Information pertaining to particular dangers for man and environment***
Analysis results for this product show no skin corrosion. In accordance with the testing results the product is labelled as skin irritant.
· ***2.3 Other hazards***
· ***Results of PBT and vPvB assessment***
· ***PBT:*** Not applicable.
· ***vPvB:*** Not applicable.

*
SECTION 3: Composition/information on ingredients

· ***3.2 Chemical characterisation: Mixtures***
· ***Description:*** Hardener for epoxy resins, formulation based on aliphatic polyamines.

· ***Dangerous components:***

CAS: 68154-62-1 EC number: 614-339-2	Fettsäuren, C18-ungesättigt, Dimere, Polymere mit Ölsäure und Triethylentetramin Eye Dam. 1, H318; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1A, H317	50 - 100%
CAS: 111-40-0 EINECS: 203-865-4 Reg.nr.: 01-2119473793-27-X	2,2'-iminodiethylamine Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	≥ 5 - ≤ 10%

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CAS: 10563-29-8 EINECS: 234-148-4 Reg.nr.: 01-2119970376-29-X	N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine Skin Corr. 1A, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1, H317	≥ 5 - ≤ 10%
CAS: 90640-67-8 EINECS: 292-588-2 Reg.nr.: 01-2119487919-13-X	Amines, polyethylenepoly-, triethylenetetramine fraction Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	≥ 5 - < 10%
CAS: 80-05-7 EINECS: 201-245-8 Reg.nr.: 01-2119457856-23-X	bisphenol A Repr. 1B, H360F; Eye Dam. 1, H318; Skin Sens. 1, H317; STOT SE 3, H335	≥ 3 - < 10%

· ***SVHC***

80-05-7	bisphenol A

· ***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*** Instantly remove any clothing contaminated by the product.
· ***After inhalation*** Supply fresh air and call for doctor for safety reasons.
· ***After skin contact***
Instantly wash with water and soap and rinse thoroughly.
In case of skin irritations or sensitizing effects, consult doctor.
· ***After eye contact***
Keep eye lids open and rinse them with ample amounts of clean running water for at least 15 minutes.
Seek medical treatment.
· ***After swallowing***
Rinse out mouth and then drink plenty of water.
Administer medicinal carbon
Do not induce vomiting; instantly call for medical help.
· ***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***
Extinguishing powder, foam or water jet. Fight larger fires with water jet or alcohol-resistant foam.
· ***For safety reasons unsuitable extinguishing agents*** Water with a full water jet.
· ***5.2 Special hazards arising from the substance or mixture***
Inhalation of combustion gases may cause serious health hazards.
During incomplete combustion carbon monoxide can be formed.
· ***5.3 Advice for firefighters***
· ***Protective equipment:*** Wear self-contained breathing apparatus.
· ***Additional information***
Collect contaminated fire fighting water separately. It must not enter drains. Provide sufficient fire fighting water retention.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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SECTION 6: Accidental release measures

· ***6.1 Personal precautions, protective equipment and emergency procedures***
Wear protective clothing.
Ensure adequate ventilation
Keep people at a distance and stay on the windward side.
· ***6.2 Environmental precautions:***
Do not allow to enter drainage system, surface or ground water.
Inform respective authorities in case product reaches water or sewage system.
· ***6.3 Methods and material for containment and cleaning up:***
Ensure adequate ventilation.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
Dispose of contaminated material as waste according to section 13.
Clean contaminated objects and floorings considering environmental 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 information on disposal.

*
SECTION 7: Handling and storage

· ***7.1 Precautions for safe handling***
Ensure good ventilation/exhaustion at the workplace.
Open and handle container with care.
Prevent formation of aerosols.
· ***Information about protection against explosions and fires:***
Keep ignition sources away - Do not smoke.

· ***7.2 Conditions for safe storage, including any incompatibilities***
· ***Storage***
· ***Requirements to be met by storerooms and containers:***
Store only in unopened original containers.
· ***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 containers.
Recommended storage temperature: 2 - 40℃
· ***7.3 Specific end use(s)*** No further relevant information available.

*
SECTION 8: Exposure controls/personal protection

· ***8.1 Control parameters***

· ***Components with limit values that require monitoring at the workplace:***	
111-40-0 2,2'-iminodiethylamine	
WEL (Great Britain)	Long-term value: 4.3 mg/m³, 1 ppm Sk

· ***DNELs***		
10563-29-8 N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine		
Oral	DNEL (consumer, long-term, systemic)	0.2 mg/kg bw/day (human)
Dermal	DNEL (worker, long-term, systemic)	0.67 mg/kg bw/day (human)
Inhalative	DNEL (worker, short-term, systemic)	7.5 mg/m³ (human)
	DNEL (worker, long-term, systemic)	3.7 mg/m³ (human)
	DNEL (consumer, long-term, systemic)	0.65 mg/m³ (human)
	DNEL (worker, short-term, local)	7.5 mg/m³ (human)

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	DNEL (worker, long-term, local)	3.7 mg/m³ (human)
	DNEL (consumer, long-term, local)	0.65 mg/m³ (human)
90640-67-8 Amines, polyethylenepoly-, triethylenetetramine fraction		
Oral	DNEL (consumer, short-term, systemic)	20 mg/kg bw/day (human)
	DNEL (consumer, long-term, systemic)	0.41 mg/kg bw/day (human)
Dermal	DNEL (worker, long-term, systemic)	0.57 mg/kg bw/day (human)
	DNEL (consumer, short-term, systemic)	8 mg/kg bw/day (human)
	DNEL (consumer, long-term, systemic)	0.25 mg/kg bw/day (human)
	DNEL (worker, long-term, local)	0.028 mg/cm² (human)
	DNEL (consumer, long-term, local)	0.43 mg/cm² (human)
	DNEL (consumer, short-term, local)	1 mg/cm² (human)
Inhalative	DNEL (worker, short-term, systemic)	5,380 mg/m³ (human)
	DNEL (worker, long-term, systemic)	1 mg/m³ (human)
	DNEL (consumer, short-term, systemic)	1,600 mg/m³ (human)
	DNEL (consumer, long-term, systemic)	0.28 mg/m³ (human)

· ***PNECs***

10563-29-8 N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine	
PNEC aqua (freshwater)	0.0092 mg/L (.)
PNEC aqua (marine water)	0.00092 mg/L (.)
PNEC STP	18.1 mg/L (.)
PNEC soil	0.00132 mg/kg soil dw (.)
PNEC sediment (freshwater)	0.034 mg/kg sedim. dw (.)
PNEC sediment (marine water)	0.00336 mg/kg sedim. dw (.)
90640-67-8 Amines, polyethylenepoly-, triethylenetetramine fraction	
PNEC aqua (freshwater)	190 mg/L (.)
PNEC aqua (marine water)	0.038 mg/L (.)
PNEC STP	4.25 mg/L (.)
PNEC soil	19.1 mg/kg soil dw (.)
PNEC sediment (freshwater)	95.9 mg/kg sedim. dw (.)
PNEC sediment (marine water)	19.2 mg/kg sedim. dw (.)
PNEC oral	0.18 mg/kg food (.)

· ***Additional information:*** The lists that were valid during the compilation were used as basis.

· ***8.2 Exposure controls***
· ***Personal protective equipment***
· ***General protective and hygienic measures***
Keep away from foodstuffs, beverages and food.
Take off all contaminated clothing immediately.
Wash hands during breaks and at the end of the work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
Do not eat or drink while working.
· ***Breathing equipment:***
Provide plenty of fresh air.
Not necessary if room is well-ventilated.
Use breathing protection in case of insufficient ventilation.
Filter A/P2.

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· ***Protection of hands:***

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· ***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. 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.

· ***Penetration time of glove material***
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· ***For the permanent contact gloves made of the following materials are suitable:***
Butyl rubber, BR
Nitrile rubber, NBR
Fluorocarbon rubber (Viton)

· ***As protection from splashes gloves made of the following materials are suitable:***
Chloroprene rubber, CR

· ***Eye protection:***

Tightly sealed safety glasses.

· ***Body protection:*** Impervious protective clothing

*

SECTION 9: Physical and chemical properties

· ***9.1 Information on basic physical and chemical properties***	
· ***General Information***	
· ***Appearance:***	
Form:	Pasty
Colour:	Grey
· ***Odour:***	Amine-like
· ***Odour threshold:***	Not determined.
· ***pH-value:***	Not determined.
· ***Change in condition***	
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	> 200 °C
· ***Flash point:***	245 °C
· ***Inflammability (solid, gaseous)***	Not applicable.
· ***Decomposition temperature:***	> 200 °C
· ***Self-inflammability:***	Product is not selfigniting.
· ***Explosive properties:***	Product is not explosive.

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· ***Critical values for explosion:***	
Lower:	Not determined.
Upper:	Not determined.
· ***Vapour pressure at 20 °C:***	< 0.95 hPa
· ***Density at 25 °C***	1.50 - 1.62 g/cm³
· ***Relative density***	Not determined.
· ***Vapour density***	Not determined.
· ***Evaporation rate***	Not determined.
· ***Solubility in / Miscibility with***	
Water:	Not miscible or difficult to mix
· ***Partition coefficient: n-octanol/water:***	Not determined.
· ***Viscosity:***	
dynamic at 25 °C:	55000 - 80000 mPas
kinematic:	Not determined.
· ***9.2 Other information***	No further relevant information available.

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.
· ***10.3 Possibility of hazardous reactions***
Reacts with strong acids
Reacts with strong oxidizing agents
· ***10.4 Conditions to avoid*** No further relevant information available.
· ***10.5 Incompatible materials:*** No further relevant information available.
· ***10.6 Hazardous decomposition products:***
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Poisonous gases/vapours

SECTION 11: Toxicological information

· ***11.1 Information on toxicological effects***
· ***Acute toxicity*** Based on available data, the classification criteria are not met.

· ***LD/LC50 values that are relevant for classification:***

90640-67-8 Amines, polyethylenepoly-, triethylenetetramine fraction		
Oral	LD50	1,716 mg/kg (rat) (OECD 401)
Dermal	LD50	1,590 mg/kg (rabbit) (OECD 402)

· ***Primary irritant effect:***
· ***Skin corrosion/irritation***
Causes skin irritation.
· ***Serious eye damage/irritation***
Causes serious eye damage.
· ***Respiratory or skin sensitisation***
May cause an allergic skin reaction.

· ***Repeated dose toxicity***

90640-67-8 Amines, polyethylenepoly-, triethylenetetramine fraction		
Oral	NOAEL (90d)	50 mg/kg bw/day (rat) (OECD 408)

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· ***CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)***
Repr. 1B
· ***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***
May damage fertility.
· ***STOT-single exposure*** Based on available data, the classification criteria are not met.
· ***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.

*
SECTION 12: Ecological information

· ***12.1 Toxicity***

· ***Aquatic toxicity:***	
90640-67-8 Amines, polyethylenepoly-, triethylenetetramine fraction	
EC50 (static)	31.1 mg/l/48h (Daphnia magna) (EU C.2)
LC50 (static)	330 mg/l/96h (Pimephales promelas)
EC50	20 mg/l/72h (Pseudokirchneriella subcapitata) (OECD 201)

· ***12.2 Persistence and degradability*** No further relevant information available.
· ***Other information:*** There are no data available about the preparation.
· ***12.3 Bioaccumulative potential*** No further relevant information available.
· ***12.4 Mobility in soil*** No further relevant information available.
· ***Additional ecological information:***
· ***General notes:***
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
· ***12.5 Results of PBT and vPvB assessment***
· ***PBT:*** Not applicable.
· ***vPvB:*** Not applicable.
· ***12.6 Other adverse effects*** No further relevant information available.

SECTION 13: Disposal considerations

· ***13.1 Waste treatment methods***
· ***Recommendation***
Must be specially treated under adherence to official regulations.
The waste code numbers mentioned are recommendations based on the probable use of the product.

· ***European waste catalogue***	
08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 04 00	wastes from MFSU of adhesives and sealants (including waterproofing products)
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances
HP 8	Corrosive
HP 10	Toxic for reproduction
HP 13	Sensitising
HP 14	Ecotoxic

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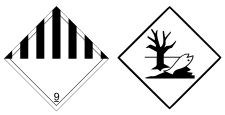
· ***Uncleaned packagings:***
· ***Recommendation:***
Non contaminated packagings can be used for recycling.
Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.
Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

*

SECTION 14: Transport information

· ***14.1 UN-Number***	
· ***ADR, IMDG, IATA***	UN3082
· ***14.2 UN proper shipping name***	
· ***ADR***	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
· ***IMDG***	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., MARINE POLLUTANT
· ***IATA***	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
· ***14.3 Transport hazard class(es)***	
· ***ADR***	
· ***Class***	9 (M6) Miscellaneous dangerous substances and articles.
· ***Label***	9
· ***IMDG, IATA***	
· ***Class***	9 Miscellaneous dangerous substances and articles.
· ***Label***	9
· ***14.4 Packing group***	
· ***ADR, IMDG, IATA***	III
· ***14.5 Environmental hazards:***	
· ***Marine pollutant:***	No Symbol (fish and tree)
· ***Special marking (ADR):***	Symbol (fish and tree)
· ***Special marking (IATA):***	Symbol (fish and tree)
· ***14.6 Special precautions for user***	Warning: Miscellaneous dangerous substances and articles.
· ***Kemler Number:***	90
· ***EMS Number:***	F-A,S-F
· ***Stowage Category***	A
· ***14.7 Transport in bulk according to Annex II of Marpol and the IBC Code***	Not applicable.

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· **Transport/Additional information:**

· **ADR**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **Transport category**	3
· **UN "Model Regulation":**	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

*
SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.
· **Seveso category** E2 Hazardous to the Aquatic Environment
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 30

· **National regulations**

· **Information about limitation of use:**
Employment restrictions concerning young persons must be observed.
Employment restrictions concerning women of child-bearing age must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.

· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

· **Substances of very high concern (SVHC) according to REACH, Article 57**

80-05-7	bisphenol A

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

*
SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H360F May damage fertility.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
· **Recommended restriction of use**
Respect restrictions of according to annex XVII of regulation no. 1907/2006 no. 28, 29 resp. 30 for substances which are carcinogenic, mutagenic or toxic to reproduction:
Shall not be placed on the market, or used as substances, as constituents of other substances, or in mixtures, for supply to the general public.
Suppliers shall ensure before the placing on the market that the packaging of such substances and

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mixtures is marked visibly, legibly and indelibly as follows: 'Restricted to professional users'.

· ***Department issuing data specification sheet:***
This Material Safety Data Sheet has been drawn up in cooperation with:
DEKRA Assurance Services GmbH, Hanomagstr. 12, D-30449 Hanover, Germany,
phone: (+49) 511 42079 - 0, reach@dekra.com.

· ***Abbreviations and acronyms:***
ADR: Accord européen sur le transport 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 (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
Repr. 1B: Reproductive toxicity – Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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