Safety Data Sheet dated 2/10/2025, version 4

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

1.1. Product identifier
Mixture identification:
Trade name: IPE 60/25

UFI: QCS9-P2C9-JS1U-0R9C
1.2. Relevant identified uses of the substance or mixture and uses advised against Recommended use:
Use at industrial sites / professional use; epoxy curing agent
Use at industrial sites / professional use; use in coatings, adhesives and sealants
Use at industrial sites / wide dispersive use by professional workers; Various sectors construction, general manufacturing
Uses advised against:
Consumer use is not supported
1.3. Details of the supplier of the safety data sheet
Company: Boldan Oy, Matkuntie 3, 05200 RAJAMÄKI, FINLAND
Competent person responsible for the safety data sheet:
info.boldan@trelleborg.com
1.4. Emergency telephone number
n. +39 0521-812188 Fax n. +39 0521-812195

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
EC regulation criteria 1272/2008 (CLP):
- Warning, Acute Tox. 4, Harmful if swallowed.
- Warning, Acute Tox. 4, Harmful in contact with skin.
- Danger, Skin Corr. 1A, Causes severe skin burns and eye damage.
- Danger, Eye Dam. 1, Causes serious eye damage.
- Warning, Skin Sens. 1A, May cause an allergic skin reaction.
- Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:
No other hazards
2.2. Label elements
Hazard pictograms:

Danger
Hazard statements:
H302+H312 Harmful if swallowed or in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.
Precautionary statements:
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/clothing and eye/face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.
P391 Collect spillage.

Special Provisions:
None

Contains
3-(aminomethyl)-3,5,5-trimethylcyclohexylamine
Amines, polyethylenepoly-, triethylenetetramine fraction
Fatty acids,C18-unsd,dimers,olig.react.prods with tall-oil fatty acids and TEPA
Phenol styrenated: May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:
None

2.3. Other hazards
No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

Other Hazards:
No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances
N.A.

3.2. Mixtures
Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 60% - < 80%	3-(aminomethyl)-3,5,5-trimethylcyclohexylamine	Index number: 612-067-00-9 CAS: 2855-13-2 EC: 220-666-8 REACH No.: 01-2119514687-32-XXXX	3.1/4/Oral Acute Tox. 4 H302 3.1/4/Dermal Acute Tox. 4 H312 3.2/1 Skin Corr. 1 H314 3.4.2/1 Skin Sens. 1 H317 4.1/C3 Aquatic Chronic 3 H412 Specific Concentration Limits: C >= 0,001%: Skin Sens. 1A H317
>= 10% - < 20%	Amines, polyethylenepoly-, triethylenetetramine fraction	CAS: 90640-67-8 EC: 292-588-2 REACH No.: 01-2119487919-13-XXXX	3.1/4/Dermal Acute Tox. 4 H312 3.3/1 Eye Dam. 1 H318 3.2/1 Skin Corr. 1 H314 3.1/4/Oral Acute Tox. 4 H302 3.4.2/1 Skin Sens. 1 H317 4.1/C3 Aquatic Chronic 3 H412 Acute Toxicity Estimate: ATE - Oral 500 mg/kg bw ATE - Dermal 1465,4 mg/kg bw
>= 10% - < 20%	Phenol styrenated	CAS: 61788-44-1 EC: 262-975-0 REACH No.: 01-2119979575-18-XXXX	4.1/A1 Aquatic Acute 1 H400 4.1/C2 Aquatic Chronic 2 H411
>= 5% - < 10%	Fatty acids,C18-unsd, dimers,olig.react.prods with tall-oil fatty acids and TEPA	CAS: 1226892-45-0 EC: 629-725-6 REACH No.: 01-2119487006-38-XXXX	3.2/2 Skin Irrit. 2 H315 3.4.2/1 Skin Sens. 1 H317 3.3/1 Eye Dam. 1 H318 4.1/C1 Aquatic Chronic 1 H410

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.
OBTAIN IMMEDIATE MEDICAL ATTENTION.
Remove contaminated clothing immediately and dispose off safely.
After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.
Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.
Give nothing to eat or drink.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
CO2 or Dry chemical fire extinguisher.
Extinguishing media which must not be used for safety reasons:
None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
See also section 8 for recommended protective equipment.
Advice on general occupational hygiene:
Do not eat, drink or smoke when using this product.
Wash hands after use
Contamined clothing should be changed before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

Store in original containers, dry, tightly closed, in a cool and well-ventilated area.
Avoid contact with skin, eyes and clothing.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limit available

DNEL Exposure Limit Values

3-(aminomethyl)-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2

Worker Professional: 0.073 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects

Amines, polyethylenepoly-, triethylenetetramine fraction - CAS: 90640-67-8

Worker Professional: 0.54 mg/m3 - Consumer: 0.096 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 14 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects
Notes: bw/giorno
Notes: bw/giorno

Phenol styrenated - CAS: 61788-44-1

Consumer: 7.5 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects
Worker Professional: 74 mg/m3 - Consumer: 13.1 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Professional: 21 mg/kg bw/d - Consumer: 7.5 07 - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Fatty acids,C18-unsd,dimers,olig.react.prods with tall-oil fatty acids and TEPA - CAS: 1226892-45-0

Worker Industry: 3.9 05 - Worker Professional: 3.9 05 - Consumer: 0.97 05 - Exposure: Human Inhalation - Frequency: Long Term (repeated)
Worker Industry: 1.1 mg/kg - Worker Professional: 1.1 05 - Consumer: 0.56 mg/kg - Exposure: Human Dermal - Frequency: Long Term (repeated)

PNEC Exposure Limit Values

3-(aminomethyl)-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2

Target: Fresh Water - Value: 0.06 mg/l
Target: Marine water - Value: 0.006 mg/l
Target: Freshwater sediments - Value: 5.784 mg/kg
Target: Marine water sediments - Value: 0.578 mg/kg
Target: 08 - Value: 1.121 mg/kg

Amines, polyethylenepoly-, triethylenetetramine fraction - CAS: 90640-67-8

Target: Fresh Water - Value: 0.027 mg/l
Target: Marine water - Value: 0.003 mg/l
Target: Freshwater sediments - Value: 8.572 mg/kg/dw
Target: Marine water sediments - Value: 0.8572 mg/kg/dw
Target: 08 - Value: 1.25 mg/kg/dw

Phenol styrenated - CAS: 61788-44-1
Target: Fresh Water - Value: 0.004 mg/l
Target: Marine water - Value: 0.0004 mg/l
Target: Freshwater sediments - Value: 0.248 mg/kg
Target: Marine water sediments - Value: 0.0248 mg/kg
Target: Microorganisms in sewage treatments - Value: 36.2 mg/l

Fatty acids,C18-unsd,dimers,olig.react.prods with tall-oil fatty acids and TEPA - CAS: 1226892-45-0
Target: Fresh Water - Value: 0.00434 mg/l
Target: Marine water - Value: 0.000434 mg/l
Target: Freshwater sediments - Value: 434.02 mg/kg
Target: Marine water sediments - Value: 43.4 mg/kg
Target: Soil (agricultural) - Value: 86.78 mg/kg

8.2. Exposure controls

Eye protection:
Wear protective goggles (ref. Standard EN 166).

Protection for skin:
Safety shoes.
Wear work clothes with long sleeves and safety footwear for professional category III use (ref. Regulation 425/2016 and standard EN 141)

Protection for hands:
Protect your hands with work gloves (ref. Regulation 425/2016 and standard EN 141)

Respiratory protection:
Use adequate respiratory protection device. (ref. Regulation 425/2016 - EN 141)

Thermal Hazards:
None

Environmental exposure controls:
Prevent from entering sewers, basements or any place where its accumulation can be dangerous.

Appropriate engineering controls:
None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Physical state:	Liquid	--	--
Colour:	pale yellow	--	--
Odour:	amine	--	--
Melting point/freezing point:	Not Relevant	--	--
Boiling point or initial boiling point and boiling range:	> 200°C	--	--
Flammability:	Not Relevant	--	--
Lower and upper	Not Relevant	--	--

explosion limit:			
Flash point:	> 100°C ° C	ISO 2719	--
Auto-ignition temperature:	Not Relevant	--	--
Decomposition temperature:	Not Relevant	--	--
pH:	12	--	--
Kinematic viscosity:	Not Relevant	--	--
Solubility in water:	soluble	--	--
Solubility in oil:	Not Relevant	--	--
Partition coefficient n-octanol/water (log value):	Not Relevant	--	--
Vapour pressure:	Not Relevant	--	--
Density and/or relative density:	0.98 - 1.02 g/ml	ISO 2811-1	--
Relative vapour density:	Not Relevant	--	--
Particle characteristics:			
Particle size:	Not Relevant	--	--

9.2. Other information

Properties	**Value**	**Method:**	**Notes:**
Viscosity:	20-60 mPas @25°C	ISO 3219-2	--

SECTION 10: Stability and reactivity

10.1. Reactivity
There are no particular risks of reaction with other substances in normal conditions of use.
10.2. Chemical stability
The product is stable in normal conditions of use and storage.
10.3. Possibility of hazardous reactions
None
10.4. Conditions to avoid
Stable under normal conditions.
10.5. Incompatible materials
None in particular.
10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
Toxicological information of the product:
N.A.
Toxicological information of the main substances found in the product:

3-(aminomethyl)-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat 1030 mg/kg - Notes: Metodo OECD Guideline 401
Test: LC50 - Route: Inhalation - Species: Rat > 5.01 mg/l - Notes: Metodo OECD Guideline 403
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Notes: Metodo OECD Guideline 402
Amines, polyethylenepoly-, triethylenetetramine fraction - CAS: 90640-67-8
a) acute toxicity:
Test: LD50 - Route: Skin - Species: Rabbit 1465.40 mg/kg - Source: OECD 402
ATE - Oral 500 mg/kg bw
ATE - Dermal 1465,4 mg/kg bw
Test: LD50 - Route: Oral - Species: Rat 1716.20 mg/kg - Source: OECD 401
ATE - Oral 500 mg/kg bw
ATE - Dermal 1465,4 mg/kg bw
Phenol styrenated - CAS: 61788-44-1
a) acute toxicity:
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg
Test: LD50 - Route: Oral - Species: Rat > 2500 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat 158.3 mg/l - Duration: 4h
Fatty acids,C18-unsd,dimers,olig.react.prods with tall-oil fatty acids and TEPA - CAS: 1226892-45-0
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

If not differently specified, the information required in Regulation (EU)2020/878 listed below must be considered as N.A.:
a) acute toxicity;
b) skin corrosion/irritation;
c) serious eye damage/irritation;
d) respiratory or skin sensitisation;
e) germ cell mutagenicity;
f) carcinogenicity;
g) reproductive toxicity;
h) STOT-single exposure;
i) STOT-repeated exposure;
j) aspiration hazard.
11.2. Information on other hazards
Endocrine disrupting properties:
No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
3-(aminomethyl)-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish 110 mg/l - Duration h: 96 - Notes: Direttiva 84/449/CEE, C.1
Endpoint: EC50 - Species: Daphnia 23 mg/l - Duration h: 48 - Notes: Linee Guida 202 OECD
Endpoint: EC50 388 mg/l - Duration h: 48
b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: INVACQ 3 mg/l - Notes: Linee Guida 202 OECD
e) Plant toxicity:
Endpoint: EC50 > 50 mg/l - Notes: Direttiva 88/302/CEE, parte C
g) toxicity on microorganisms:

Endpoint: EC10 - Species: BATTERI 1120 mg/l - Duration h: 18 - Notes: DIN 38412 parte 8

Amines, polyethylenepoly-, triethylenetetramine fraction - CAS: 90640-67-8

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 570 mg/l - Duration h: 96 - Notes: Dir. 67/548/CEE, Allegato V, C.1

Endpoint: LC50 - Species: Fish 200-500 mg/l - Duration h: 96

Endpoint: LC50 - Species: Fish 330 mg/l - Duration h: 96 - Notes: EPA OTS 797.1400

g) toxicity on microorganisms:

Endpoint: EC50 - Species: BATTERI > 100 mg/l - Duration h: 28 - Notes: Linee Guida 216 OECD

h) Acute Daphnia Toxicity::

Endpoint: EC50 - Species: Daphnia 31.1 mg/l - Duration h: 48 - Notes: Dir. 67/548/CEE, Allegato V, C.2

Fatty acids,C18-unsd,dimers,olig.react.prods with tall-oil fatty acids and TEPA - CAS: 1226892-45-0

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 0.19 mg/l - Duration h: 96

12.2. Persistence and degradability

IPE 60/25

Biodegradability: No data available.

3-(aminomethyl)-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2

Biodegradability: Poorly biodegradable

Amines, polyethylenepoly-, triethylenetetramine fraction - CAS: 90640-67-8

Biodegradability: Persistence

Phenol styrenated - CAS: 61788-44-1

Biodegradability: Non-readily biodegradable

Fatty acids,C18-unsd,dimers,olig.react.prods with tall-oil fatty acids and TEPA - CAS: 1226892-45-0

Biodegradability: No data available.

12.3. Bioaccumulative potential

IPE 60/25

Bioaccumulation: Information not available

3-(aminomethyl)-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2

Bioaccumulation: Shortly bioaccumulative.

Amines, polyethylenepoly-, triethylenetetramine fraction - CAS: 90640-67-8

Bioaccumulation: Shortly bioaccumulative.

Phenol styrenated - CAS: 61788-44-1

Bioaccumulation: Information not available

Fatty acids,C18-unsd,dimers,olig.react.prods with tall-oil fatty acids and TEPA - CAS: 1226892-45-0

Bioaccumulation: Information not available

12.4. Mobility in soil

IPE 60/25

Mobility in soil: No data available

3-(aminomethyl)-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2

Mobility in soil: low potential

Amines, polyethylenepoly-, triethylenetetramine fraction - CAS: 90640-67-8

Mobility in soil: low potential

Phenol styrenated - CAS: 61788-44-1

Mobility in soil: No data available

Fatty acids,C18-unsd,dimers,olig.react.prods with tall-oil fatty acids and TEPA - CAS: 1226892-45-0

Mobility in soil: No data available

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects
None

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number or ID number

ADR-UN number:	2735
IATA-UN Number:	2735
IMDG-UN Number:	2735

14.2. UN proper shipping name

ADR-Shipping Name:	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (mixture containing Isophoronediamine; Triethylenetetramine)
IATA-Shipping Name:	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (mixture containing Isophoronediamine; Triethylenetetramine)
IMDG-Shipping Name:	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (mixture containing Isophoronediamine; Triethylenetetramine)

14.3. Transport hazard class(es)

ADR-Class:	8
ADR-Label:	8
ADR - Hazard identification number:	80
IATA-Class:	8
IATA-Label:	8
IMDG-Class:	8

14.4. Packing group

ADR-Packing Group:	II
IATA-Packing group:	II
IMDG-Packing group:	II

14.5. Environmental hazards

Marine pollutant:	No
IMDG-EMS:	F-A,S-B

14.6. Special precautions for user
ADR-Transport category (Tunnel restriction code): E

IMDG-Shipping Name:	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (mixture containing Isophoronediamine; Triethylenetetramine)

14.7. Maritime transport in bulk according to IMO instruments
N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 2020/878
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 CLP)
Regulation (EU) n. 2023/707
Regulation (EU) n. 2023/1434 (ATP 19 CLP)
Regulation (EU) n. 2023/1435 (ATP 20 CLP)
Regulation (EU) n. 2024/197 (ATP 21 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

Restriction 75

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: E2

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

Substances for which a Chemical Safety Assessment has been carried out:

3-(aminomethyl)-3,5,5-trimethylcyclohexylamine
Amines, polyethylenepoly-, triethylenetetramine fraction

SECTION 16: Other information

Text of phrases referred to under heading 3:

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.
H318 Causes serious eye damage.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
H315 Causes skin irritation.
H410 Very toxic to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1	3.2/1	Skin corrosion, Category 1

Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Skin Sens. 1A	3.4.2/1A	Skin Sensitisation, Category 1A
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking
SECTION 2: Hazards identification
SECTION 3: Composition/information on ingredients
SECTION 7: Handling and storage
SECTION 8: Exposure controls/personal protection
SECTION 9: Physical and chemical properties
SECTION 11: Toxicological information
SECTION 12: Ecological information
SECTION 14: Transport information
SECTION 15: Regulatory information
SECTION 16: Other information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	**Classification procedure**
Acute Tox. 4, H302	Calculation method
Acute Tox. 4, H312	Calculation method
Skin Corr. 1A, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1A, H317	Calculation method
Aquatic Chronic 2, H411	Calculation method

This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.