LECHSYS ISOLACK HARDENER STANDARD

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

1.1 Product identifier

: LECHSYS ISOLACK HARDENER STANDARD Trade name

Product code : L0290344

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

Use of the : Paints, varnishes and enamels

Substance/Mixture

Chemical nature : Compound for pigmented epoxy

1.3 Details of the supplier of the safety data sheet

Company : Lechler SpA

> Via Cecilio 17 22100 Como- CO-

Telephone : +39031586111 Telefax : +39031586206 E-mail address : safety@lechler.eu

Responsible/issuing person

1.4 Emergency telephone number

Tel. +39-031-586301 - This telephone number is available during office hours only. (8.00-18.00)

This telephone number is available during office hours only.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 H226: Flammable liquid and vapour.

Skin irritation. Category 2 H315: Causes skin irritation.

Respiratory sensitisation, Category 1 H334: May cause allergy or asthma symptoms or

breathing difficulties if inhaled.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Specific target organ toxicity - single H336: May cause drowsiness or dizziness.

exposure, Category 3

Specific target organ toxicity - single H335: May cause respiratory irritation.

exposure, Category 3

Chronic aquatic toxicity, Category 3 H412: Harmful to aquatic life with long lasting

effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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Hazard pictograms







Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting

effects.

Precautionary statements : **Prevention**:

P210 Keep away from heat, hot surfaces, sparks,

open flames and other ignition sources. No

smokina.

P261 Avoid breathing vapours.
P284 Wear respiratory protection.

Response:

P342 + P311 If experiencing respiratory symptoms: Call a

POISON CENTER/doctor.

P362 + P364 Take off contaminated clothing and wash it

before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical

or alcohol-resistant foam to extinguish.

Hazardous components which must be listed on the label:

• 123-86-4 n-butyl acetate

• 53880-05-0 Isophorondiisocyanate homopolymer

• 28182-81-2 Polysocyanate HDI Derivative

• 4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

Additional Labelling:

Restricted to professional users.

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards

None known

The information required is contained in this Material Safety Data Sheet.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

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Chemical nature : Liquid solution

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]		
Isophorondiisocyanate homopolymer	53880-05-0 931-312-3 01-2119488734-24	Resp. Sens. 1; H334 Skin Sens. 1B; H317 STOT SE 3; H335	>= 20 - < 25		
Polysocyanate HDI Derivative	28182-81-2 500-060-2 01-2119485796-17	Acute Tox. 4; H332 Skin Sens. 1; H317 STOT SE 3; H335 Resp. Sens. 1; H334	>= 17,5 - < 20		
xylene	1330-20-7 215-535-7 01-2119488216-32	Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit. 2; H315 Note C	>= 17,5 - < 20		
Hydrocarbons, C9, aromatics	64742-95-6 918-668-5 01-2119455851-35-0006	Flam. Liq. 3; H226 STOT SE 3; H335, H336 Aquatic Chronic 2; H411 Asp. Tox. 1; H304 EUH066 Note P	>= 5 - < 10		
3-isocyanatomethyl- 3,5,5- trimethylcyclohexyl isocyanate	4098-71-9 223-861-6 01-2119490408-31	Acute Tox. 1; H330 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 STOT SE 3; H335 Aquatic Chronic 2; H411 Note 2	>= 0,1 - < 0,5		
Substances with a workplace exposure limit :					
n-butyl acetate	123-86-4 204-658-1 01-2119485493-29	Flam. Liq. 3; H226 STOT SE 3; H336	>= 25 - < 30		

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : When symptoms persist or in all cases of doubt seek medical

advice.

Never give anything by mouth to an unconscious person.

If inhaled : Remove to fresh air.

Keep patient warm and at rest.

If breathing is irregular or stopped, administer artificial

respiration.

according to Regulation (EC) No. 830/2015

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If unconscious, place in recovery position and seek medical

advice.

In case of skin contact : Take off all contaminated clothing immediately.

Wash skin thoroughly with soap and water or use recognized

skin cleanser.

Do NOT use solvents or thinners. Put shower on working place

In case of eye contact : Irrigate copiously with clean, fresh water for at least 10

minutes, holding the eyelids apart.

Seek medical advice.

Put eye-washer on working place

Remove contact lenses.

If swallowed : If accidentally swallowed obtain immediate medical attention.

Do NOT induce vomiting.

Keep at rest.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

Risks : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : The first aid procedure should be established in consultation

with the doctor responsible for industrial medicine.

Seek medical advice.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or

carbon dioxide.

Keep containers and surroundings cool with water spray.

Unsuitable extinguishing

media

Do NOT use water jet.

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

: As the product contains combustible organic components, fire

will produce dense black smoke containing hazardous

products of combustion (see section 10).

Exposure to decomposition products may be a hazard to

health.

Cool closed containers exposed to fire with water spray. Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

according to Regulation (EC) No. 830/2015

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5.3 Advice for firefighters

Special protective equipment

for firefighters

: Wear self-contained breathing apparatus for firefighting if

necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Solvent vapours are heavier than air and may spread along

floors.

Ensure adequate ventilation.

Use personal protective equipment. Evacuate personnel to safe areas.

Keep people away from and upwind of spill/leak.

Ventilate the area.

6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water

courses.

If the product contaminates rivers and lakes or drains inform

respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Clean with detergents. Avoid solvents.

Contain and collect spillages with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container. The contaminated area

should be cleaned up immediately with a suitable

decontaminant. One possible (flammable) decontaminant comprises water (45 parts by volume)/ethanol or isopropanol

(50 parts)/concentrated

(d: 0.880) ammonia solution (5 parts). A non-flammable alternative is sodium carbonate (5 parts)/water (95 parts).

Pick up and transfer to properly labelled containers.

Clean contaminated surface thoroughly.

Dam up.

Soak up with inert absorbent material and dispose of as

hazardous waste.

6.4 Reference to other sections

Refer to section 15 for specific national regulation.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid exceeding the given occupational exposure limits (see

section 8).

Use only in area provided with appropriate exhaust ventilation.

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Avoid contact with skin, eves and clothing.

Smoking, eating and drinking should be prohibited in the

application area.

Avoid inhalation of vapour or mist. For personal protection see section 8.

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture

is being used.

Thoroughly mix before using

After using, store in a well-sealed container

Advice on protection against

fire and explosion

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than

the occupational exposure limits.

When transferring from one container to another apply earthing measures and use conductive hose material.

No sparking tools should be used.

The product should only be used in areas from which all naked lights and other sources of ignition have been

excluded.
No smoking.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Observe label precautions.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Store between 5° an 35°C in a dry, well ventilated place away

from source of heat, ignition and direct sunlight.

Electrical installations / working materials must comply with

the technological safety standards.

Store in accordance with the particular national regulations.

Advice on common storage

Keep away from oxidizing agents, strongly acid or alkaline

materials, as well as of amines, alcohols and water.

German storage class : 3 Flammable liquids

7.3 Specific end use(s)

: This information is not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
n-butyl	123-86-4	TWA	50 ppm	2016-03-01	ACGIH
acetate					
		STEL	150 ppm	2016-03-01	ACGIH

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xylenes	1	330-20-7	TWA	50 ppm 221 mg/m3	2000-06-16	2000/39/EC
Further information	:	skin: Identifies the possibility of significant uptake through the skinIndicative				
			STEL	100 ppm 442 mg/m3	2000-06-16	2000/39/EC
Further information	:	skin: Identi	fies the poss	ibility of significant upta	ake through the skinIndic	ative
isocyanatomet hyl-3,5,5- trimethylcyclo hexyl isocyanate	4	098-71-9	TWA	0,005 ppm		ACGIH
Further information	:	Resp. Sens	s.: Respirato	ry sensitisation		

DNEL

Polysocyanate HDI Derivative : End Use: Workers

Exposure routes: Inhalation

Potential health effects: Long-term local effects

Value: 0,5 mg/m3

End Use: Workers

Exposure routes: Inhalation

Potential health effects: Short-term local effects

Value: 1 mg/m3

xylene : End Use: Consumers

Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 65,3 mg/m3

End Use: Consumers Exposure routes: Oral

Potential health effects: Long-term systemic effects

Value: 12,5 mg/kg

End Use: Workers

Exposure routes: Inhalation

Potential health effects: Short-term local effects

Value: 442 mg/kg

End Use: Workers Exposure routes: Dermal

Potential health effects: Long-term systemic effects

Value: 212 mg/kg

End Use: Workers

Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 221 mg/m3

n-butyl acetate : End Use: Professional use

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Exposure routes: Skin contact

Potential health effects: Local effects

Exposure time: 8 h Value: 7 ppm

End Use: Professional use Exposure routes: Inhalation

Potential health effects: Local effects

Value: 48 mg/m3

PNEC

Polysocyanate HDI Derivative : Marine water

Value: 0,0127 mg/l

Fresh water

Value: 0,127 mg/l

Marine sediment Value: 26670 mg/kg

Fresh water sediment Value: 266700 mg/kg

Intermittent use/release Value: 1,27 mg/l

Sewage treatment plant Value: 38,3 mg/l

Soil

Value: 53182 mg/kg

xylene : Fresh water

Value: 0,32 mg/l

Intermittent use/release Value: 0,32 mg/l

Marine water Value: 0,32 mg/l

Fresh water sediment Value: 12,46 mg/kg

Marine sediment Value: 12,46 mg/kg

Soil

Value: 2,31 mg/kg

Sewage treatment plant Value: 6,58 mg/l

n-butyl acetate : Water

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Value: 0,18 mg/l

Soil

Value: 0,093 mg/kg

8.2 Exposure controls

Engineering measures

Use only in spray paint booth or enclosure.

Personal protective equipment

Respiratory protection : In case of mist, spray or aerosol exposure wear suitable

personal respiratory protection and protective suit. Wear a positive-pressure supplied-air respirator.

Apply technical measures to comply with the occupational

exposure limits.

Hand protection : For prolonged or repeated contact use protective gloves.

Chemical resistant gloves made of butyl rubber or nitrile

rubber category III according to EN 374.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the

danger of cuts, abrasion, and the contact time.

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of

the CE approved gloves.

Barrier creams may help to protect the exposed areas of skin,

they should however not be applied once exposure has

occurred.

Skin should be washed after contact. Wash your hands and put on barrier creams

Eye protection : Chemical resistant goggles must be worn.

Skin and body protection : Skin should be washed after contact.

Personnel should wear protective clothing. Flame retardant antistatic protective clothing. Workers should wear antistatic footwear.

Environmental exposure controls

General advice : Try to prevent the material from entering drains or water

courses.

If the product contaminates rivers and lakes or drains inform

respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

according to Regulation (EC) No. 830/2015

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Appearance : liquid

Odour : solvent-like

Flash point : > 23 - 55 °C

Ignition temperature : not determined

Lower explosion limit : No data available

: No data available Upper explosion limit

Auto-ignition temperature : Not applicable

рΗ : not determined

Freezing point : Not applicable

Boiling point : not determined

: 1,000 hPa Vapour pressure

at 50 °C

Density : 0,9549 g/cm3

Water solubility : not determined

Partition coefficient: n-

octanol/water

: No data available

Solubility in other solvents : not determined

Flow time : 28 s

2 mm

Method: ASTM D 1200 '82

Relative vapour density : Not applicable

Evaporation rate : not determined

9.2 Other information

Solids by weight : 43,85 %

Volatile organic compounds : 56,15 %

(VOC) content

SECTION 10: Stability and reactivity

10.1 Reactivity

None reasonably foreseeable.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

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Hazardous reactions : Keep away from oxidizing agents, strongly alkaline and

strongly acid materials in order to avoid exothermic reactions.

Avoid moisture.

Amines and alcohols cause exothermic reactions.

Mixture reacts slowly with water resulting in evolution of CO2. Evolution of CO2 in closed containers causes overpressure

and produces a risk of bursting.

10.4 Conditions to avoid

Conditions to avoid : Our products were manufactured in compliance with safety

standards to avoid decomposition and degrading under the

defined conditions.

Taking the product type into account, it is advisable to leave the product in its original packaging thus avoiding transferring

it.

10.5 Incompatible materials

Materials to avoid : Keep away from oxidizing agents, strongly alkaline and

strongly acid materials in order to avoid exothermic reactions.

10.6 Hazardous decomposition products

Hazardous decomposition

products

: Carbon dioxide (CO2), carbon monoxide (CO), oxides of

nitrogen (NOx), dense black smoke.

Thermal decomposition : Not applicable

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l, 4 h, vapour, Calculation

method

Acute dermal toxicity : Acute toxicity estimate: > 2.000 mg/kg, Calculation method

Acute toxicity (other routes of :

administration)

. Acute toxicity estimate. > 2.000 mg/kg, Calculation method

Isocyanates may cause acute irritation and/or sensitisation of the respiratory system leading to tightness of the chest, wheeziness and an asthmatic condition.. Persons allergic to

isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates.

Skin corrosion/irritation : Repeated or prolonged contact with the mixture may cause

removal of natural fat from the skin resulting in desiccation of the skin. The product may be absorbed through the skin.

Further information : The concentration of each substance should be borne in mind

in assessing the toxicological effects deriving from the

preparation.

Components:

according to Regulation (EC) No. 830/2015

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xylene:

Acute dermal toxicity : Acute toxicity estimate: 1.100 mg/kg, Converted acute toxicity

point estimate

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish

Remarks:

No data is available on the product itself.

12.2 Persistence and degradability

Biodegradability : No data available

12.3 Bioaccumulative potential

Bioaccumulation : No data available

12.4 Mobility in soil

Mobility : No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Additional ecological

information

: The product contains dangerous substances for the

environment (see chapter no 3).

The concentration of each substance should be borne in mind

in assessing the toxicological effects deriving from the

preparation.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water

courses or the soil.

Disposal together with normal waste is not allowed. Special

disposal required according to local regulations.

Must be incinerated.

according to Regulation (EC) No. 830/2015

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Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

According to the European Waste Catalogue, Waste Codes

are not product specific, but application specific.

The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. The following Waste Codes are only suggestions:150110*

SECTION 14: Transport information

14.1 UN number

ADR : UN 1263

IMDG : UN 1263

IATA : UN 1263

14.2 Proper shipping name

ADR PAINT RELATED MATERIAL

IMDG PAINT RELATED MATERIAL

IATA Paint related material

14.3 Transport hazard class(es)

ADR : 3

IMDG : 3

IATA : 3

14.4 Packing group

ADR

Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3

IMDG

Packing group : III
Labels : 3

EmS Code : F-E,S-E

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IATA

Packing group : III
Labels : 3

14.5 Environmental hazards

ADR

Environmentally hazardous : no

IMDG

Marine pollutant : no

IATA

Environmentally hazardous : no

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High

Concern for Authorisation

(Article 59).

: Not applicable

REACH - List of substances

subject to authorisation

(Annex XIV)

: Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

: Banned and/or restricted

123-86-4	n-butyl acetate
64742-95-6	Hydrocarbons, C9, aromatics

MAL-Code-Number : 5-5 (1993)

838.657-m3 air/10 g

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German storage class

(TRGS 510)

: 3: Flammable liquids

Risk classification according

: Exempt

to VbF

see user defined free text

Water contaminating class

: highly water endangering

(Germany)

VWVWS A4

This safety datasheet complies with the requirements of Regulation (EC) No. 830/2015. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

15.2 Chemical safety assessment

No data is available on the product itself.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

EUH066	Repeated exposure may cause skin dryness or cracking.
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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

List of references

Regulation of the European Parliament and Council Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures (CLP)

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products(BPR)

This safety datasheet complies with the requirements of Regulation (EC) No. 830/2015.

Key or legend to abbreviations and acronyms used in the safety data sheet

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways:

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road: ASTM - American Society for the Testing of Materials;

BW - Body weight;

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CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008;

CMR - Carcinogen, Mutagen or Reproductive Toxicant;

DIN - Standard of the German Institute for Standardisazion;

ECHA - European Chemicals Agency; EC-Number - European Community number;

ECx - Concentration associated with x% response;

ELx - Loading rate associated with x% response;

EmS - Emergency Schedule;

ErCx - Concentration associated with x% growth rate response; GLP - Good Laboratory Practice;

IATA - International Air Transport Association;

IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk;

IC50 - Half maximal inhibitory concentration;

ICAO - International Civil Aviation Organization;

IMDG - International Maritime Dangerous Goods;

IMO - International Maritime Organization;

ISO - International Organisation for Standardization;

LC50 - Lethal Concentration to 50 % of a test population;

LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose);

MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified;

NO(A)EC - No Observed (Adverse) Effect Concentration;

NO(A)EL - No Observed (Adverse) Effect Level;

NOELR - No Observable Effect Loading Rate;

OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention;

PBT - Persistent, Bioaccumulative and Toxic substance;

REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals;

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail;

SADT - Self-Accelerating Decomposition Temperature;

SDS - Safety Data Sheet;

TRGS - Technical Rule for Hazardous Substances;

UN - United Nations:

vPvB - Very Persistent and Very Bioaccumulative

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.