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

1.1 Product identifier

Trade name	:	HI-GARD SEALER
Product code	:	L0040122

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

Use of the Substance/Mixture	:	Paints, varnishes and enamels
Chemical nature	:	Dual compound primer (undercoat)

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 Fax +39-031-586299

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 corrosion, Category 1C	H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, Category 3, Central nervous system	H336: May cause drowsiness or dizziness.
Chronic aquatic toxicity, Category 3	H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Danger

Hazard statements :

H226	Flammable liquid and vapour.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
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 smoking.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
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:

- 64742-95-6 Hydrocarbons, C9, aromatics
- 54914-37-3 1,3,3-trimethyl-N-(2-methylpropylidene)-5-[(2-methylpropylidene)amino]cyclohexanemethylamine
- 85711-46-2 Fatty acids, C14-18 and C16-18-unsatd., maleated

2.3 Other hazards

None known.
No hazards resulting from the material as supplied.
The information required is contained in this Material Safety Data Sheet.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Liquid pigmented dispersion

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
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	>= 12,5 - < 15
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	>= 10 - < 12,5
1,3,3-trimethyl-N-(2-methylpropylidene)-5-[(2-methylpropylidene)amino]cyclohexanemethylamine	54914-37-3 259-393-4 01-2119978283-28-0000	Skin Corr. 1C; H314 Eye Irrit. 2; H319 Skin Sens. 1A; H317	>= 5 - < 10
ethylbenzene	100-41-4 202-849-4 01-2119489370-35	Flam. Liq. 2; H225 Acute Tox. 4; H332 STOT RE 2; H373 Asp. Tox. 1; H304	>= 1 - < 5
Fatty acids, C14-18 and C16-18-unsatd., maleated	85711-46-2 288-306-2 01-2119976378-19-0000	Skin Irrit. 2; H315 Skin Sens. 1; H317	>= 0,1 - < 1
Substances with a workplace exposure limit :			
barium sulfate	7727-43-7 231-784-4 01-2119491274-35		>= 25 - < 30
n-butyl acetate	123-86-4 204-658-1 01-2119485493-29	EUH066 Flam. Liq. 3; H226 STOT SE 3; H336	>= 5 - < 10
(2-methoxymethylethoxy)propanol	34590-94-8 252-104-2 01-2119450011-60		>= 5 - < 10

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. 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.

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. Avoid contact with skin, eyes 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. 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. Solvent vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Electrical installations / working materials must comply with the technological safety standards. Keep away from sources of ignition - No smoking. Store between 5° an 35°C in a dry, well ventilated place away from source of heat, ignition and direct sunlight. Store in accordance with the particular national regulations.

Advice on common storage : Keep away from oxidizing agents and strongly acid or alkaline materials.

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
barium sulfate	7727-43-7	TWA	10 mg/m3	2007-01-01	ACGIH
xylenes	1330-20-7	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: Identifies the possibility of significant uptake through the skinIndicative			
n-butyl acetate	123-86-4	TWA	150 ppm 713 mg/m3	2007-01-01	ACGIH
		STEL	200 ppm 950 mg/m3	2007-01-01	ACGIH
(2-methoxymethylethoxy)propanol	34590-94-8	TWA	50 ppm 308 mg/m3	2000-06-16	2000/39/EC
Further information	:	skin: Identifies the possibility of significant uptake through the skinIndicative			
ethylbenzene	100-41-4	TWA	100 ppm 442 mg/m3	2000-06-16	2000/39/EC
Further information	:	skin: Identifies the possibility of significant uptake through the skinIndicative			
		STEL	200 ppm 884 mg/m3	2000-06-16	2000/39/EC
Further information	:	skin: Identifies the possibility of significant uptake through the skinIndicative			

DNEL

1,3,3-trimethyl-N-(2-methylpropylidene)-5-[(2-methylpropylidene)amino]cyclohexanemethylamine : End Use: Professional use
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 150 mg/m3

barium sulfate	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 10 mg/m3 End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 10 mg/m3 End Use: Consumer use Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 10 mg/m3 End Use: Consumer use Exposure routes: Ingestion Potential health effects: Long-term systemic effects
n-butyl acetate	:	End Use: Professional use 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

1,3,3-trimethyl-N-(2-methylpropylidene)-5-[(2-methylpropylidene)amino]cyclohexanemethylamine	:	Marine sediment No data available Soil No data available Fresh water Value: 0,0147 mg/l Marine water Value: 0,00147 mg/l Fresh water sediment No data available
barium sulfate	:	Fresh water Value: 0,115 mg/l Fresh water sediment Value: 600,4 mg/kg

		Soil Value: 207,7 mg/kg
n-butyl acetate	:	Water Value: 0,18 mg/l Soil Value: 0,093 mg/kg

8.2 Exposure controls

Personal protective equipment

Respiratory protection	:	Apply technical measures to comply with the occupational exposure limits. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If the occupational exposure limits cannot be met, in exceptional cases suitable respiratory equipment should be worn only for a short period of time. Respirator with combination filter for vapour/particulate (EN 141)
Hand protection	:	Solvent-resistant gloves (butyl-rubber) For prolonged or repeated contact use protective gloves. Protective gloves complying with 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. Working clothes must not consist of textiles, which show a dangerous melting behaviour in case of fire. Personnel should wear 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

Appearance	:	liquid
Odour	:	solvent-like
Flash point	:	> 23 - 55 °C
Ignition temperature	:	not determined
Lower explosion limit	:	No data available
Upper explosion limit	:	No data available
Auto-ignition temperature	:	Not applicable
pH	:	not determined
Freezing point	:	Not applicable
Boiling point	:	not determined
Vapour pressure	:	1,000 hPa at 50 °C
Density	:	1,2913 g/cm3
Water solubility	:	not determined
Partition coefficient: n-octanol/water	:	No data available
Solubility in other solvents	:	not determined
Flow time	:	45 s 6 mm Method: ISO/DIN 2431 '84
Relative vapour density	:	Not applicable
Evaporation rate	:	not determined

9.2 Other information

Solids by weight	:	61 %
Volatile organic compounds (VOC) content	:	38,99 %

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

Hazardous reactions	:	No dangerous reaction known under conditions of normal use.

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
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:

xylene :

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

1,3,3-trimethyl-N-(2-methylpropylidene)-5-[(2-methylpropylidene)amino]cyclohexanemethylamine :

Acute oral toxicity	:	LD50: 4.150 mg/kg, Rat, OECD Test Guideline 401
Acute dermal toxicity	:	LD50: > 5.000 mg/kg, Rat, OECD Test Guideline 402
Skin corrosion/irritation	:	Result: Corrosive, category 1C - where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days., OECD Test Guideline 404
Serious eye damage/eye irritation	:	Rabbit, Result: Irritating to eyes., OECD Test Guideline 405
Respiratory or skin sensitisation	:	Guinea pig, Result: May cause sensitisation by skin contact., OECD Test Guideline 406
Germ cell mutagenicity		
Genotoxicity in vitro	:	Ames test, Result: negative, OECD Test Guideline 471

barium sulfate :

Acute oral toxicity	:	Acute toxicity estimate: 500 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.
Toxicity to fish 1,3,3-trimethyl-N-(2-methylpropylidene)-5-[(2-methylpropylidene)amino]cyclohexanemethylamine	:	LC50: > 100 mg/l Exposure time: 96 h Species: Danio rerio (zebra fish) Method: OECD Test Guideline 203
(2-methoxymethylethoxy)propanol	:	LC50: > 10.000 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) 1,3,3-trimethyl-N-(2-	:	NOEC: 3 mg/l

methylpropylidene)-5-[(2-methylpropylidene)amino]cyclohexanemethylamine	Exposure time: 21 d Species: Daphnia magna (Water flea)

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.

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 3469
IMDG	:	UN 3469
IATA	:	UN 3469

14.2 Proper shipping name

ADR	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE
IMDG	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE
IATA	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE

14.3 Transport hazard class(es)

ADR	:	3 (8)
IMDG	:	3 (8)
IATA	:	3 (8)

14.4 Packing group

ADR

Packing group	:	III
Classification Code	:	FC
Hazard Identification Number	:	38
Labels	:	3 (8)

IMDG

Packing group	:	III
Labels	:	3 (8)
EmS Code	:	F-E,S-D

IATA

Packing group	:	III
Labels	:	3 (8)

14.5 Environmental hazards

ADR

Environmentally hazardous : no

IMDG

Marine pollutant : no

IATA

Environmentally hazardous : no

14.6 Special precautions for user

Remarks : Packagings smaller or equal to 450 l, transport according to section E of marginal 2301.

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

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

MAL-Code-Number : 3-6 (1993)
1.069-m3 air/10 g

Risk classification according to VbF	:	Flash point 21 °C to 55 °C, at 15 °C not miscible in water Specially dangerous flammable liquids
Water contaminating class (Germany)	:	highly water endangering VWVWS A4

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
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.
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.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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.