1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information

Product name	:	HS HARDENER EXTRA SPEEDY
Product code	:	L0000174
Use of the Substance/Preparation	:	Poliysocyanic compound - professional use
Company	:	Lechler SpA Via Cecilio 17 22100 Como
Telephone	:	+39031586111
Telefax	:	+39031586206
E-mail address	:	safety@lechler.it

In order to get more information and in case of emergencies please address to Lechler Group Security Office.

: Tel. +39-031-586301
Fax +39-031-586299

2. HAZARDS IDENTIFICATION


Harmful

Hazardous components which must be listed on the label:
- Polysocyanate HDI Derivative

R-phrase(s) :
Flammable.
May cause sensitization by inhalation and skin contact.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Repeated exposure may cause skin dryness or cracking.
Vapours may cause drowsiness and dizziness.

S-phrase(s) :
Do not breathe vapour.
Wear suitable protective clothing and gloves.
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
This material and its container must be disposed of as hazardous waste.

Special labelling of certain preparations :
Contains isocyanates. See information supplied by the manufacturer.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Poliysocyanic compound - professional use

Hazardous components :

Components	CAS-No.	EC-No.	Symbol(s)	R-phrase(s)	Concentration [%]
Xylene	1330-20-7	601-022-00-9	Xn	R20/21, R38, R10	>= 10 - < 12,5
N-Butyl Acetate	123-86-4	607-025-00-1		R10, R66, R67	>= 30 - < 50
isobutyl acetate	110-19-0	607-026-00-7	F	R11, R66	>= 7 - < 10
2-Methoxy-1-Methylethyl Acetate	108-65-6	607-195-00-7	Xi	R10, R36	>= 3 - < 5
Solvent Naphtha, Light Aromatic	64742-95-6	649-356-00-4	Xn, N	R37, R51/53, R10, R66, R67, R65	>= 3 - < 5
Polysocyanate HDI Derivative	28182-81-2		Xi	R42/43, R52/53	>= 30 - < 50
Dibutyl Tin Dilaurate	77-58-7		N, T	R60, R61, R22, R36/38, R48/25, R68, R50/53	>= 0,1 - < 0,2

4. 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.

Inhalation : 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.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Keep containers and surroundings cool with water spray.
Extinguishing media which shall not be used for safety reasons	:	Do NOT use water jet.
Specific hazards during fire fighting	:	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.
Special protective equipment for fire-fighters	:	Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

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.
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.

Methods for cleaning up	:	Clean with detergents. Avoid solvents. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).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.
Additional advice	:	Refer to section 15 for specific national regulation.

7. HANDLING AND STORAGE

Handling

Safe handling advice	:	Avoid exceeding of 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. 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 preparation 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.

Storage

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 oxidising agents, strongly acid or alkaline materials, as well as of amines, alcohols and water.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value [mg/m^3]	Value [ppm]	Basis
Xylene	1330-20-7	221,00	50,00	
N-Butyl Acetate	123-86-4	713,00 950,00	150,00 200,00	
isobutyl acetate	110-19-0	713,00	150,00	
2-Methoxy-1-Methylethyl Acetate	108-65-6	275,00	50,00	
Solvent Naphtha, Light Aromatic	64742-95-6	100,00	50,00	

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.
In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.
Wear a positive-pressure supplied-air respirator.

Hand protection : For prolonged or repeated contact use protective 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
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.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	liquid
Flash point	:	> 23 - 55 °C
Density	:	0,96 g/cm3
Viscosity	:	<= 60 s Transversale section: 6 mm Method: 2431 '84 (ISO 6)
Solids by weight	:	37,92 %
Volatile organic compounds (VOC) content	:	62,08 %

10. STABILITY AND REACTIVITY

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.
Hazardous reactions	:	Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Avoid moisture. Amines and alcohols cause exothermic reactions. Preparation reacts slowly with water resulting in evolution of CO2. Evolution of CO2 in closed containers causes overpressure and produces a risk of bursting.

11. TOXICOLOGICAL INFORMATION

Acute inhalation toxicity	:	Exposure to component solvent vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects. Such as: mucous membrane irritation, respiratory system irritation, adverse effects on kidney, liver and central nervous system. Symptoms and signs: headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases loss of consciousness. Inhalation of airborne droplets may cause irritation of the respiratory tract.
Acute toxicity (other routes of administration)	:	Isocyanates may cause acute irritation and/or sensitisation of the respiratory system leading to tightness of the chest, wheeziness and an asthmatic condition.
Skin irritation	:	Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in desiccation of the skin. The product may be absorbed through the skin.
Note	:	The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation.

N-Butyl Acetate	OBSERVATIONS ON HUMAN SUBJECTS: Inhalation: 3300 ppm (16 mg/l), for short periods, cause serious irritation to the eyes and to the nose. Inhalation: 200-300 ppm (1-1.4 mg/l), for short periods, cause moderate irritation to the eyes and to the nose. Inhaling the vapours can irritate the respiratory system. The vapours can cause headache and nausea. As a liquid it can irritate the eyes and cause conjunctivitis, it can irritate the skin and cause dermatitis and, if swallowed, causes inebriation, hallucinations and sedation. Symptoms of illness at 500 ppm. Serious toxic effects at 2,000 ppm for 60 min. TCLo: 200 ppm
Solvent Naphtha, Light Aromatic	ACUTE: INHALATION: Vapor concentration above recommended exposure levels may be irritating to the eyes and the repiratory tract, may cause headaches and dizziness, could be anesthetic and may other nervous system effects. SKIN CONTACT: Low order of toxicity. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. EYE CONTACT: Will cause eye discomfort, but will noy injure eye tissue. INGESTION: Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary edema. Minimal toxicity.

12. ECOLOGICAL INFORMATION

Further information on ecology	:	The product contains dangerous substances for the environment (see chapter n° 2), The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation.

Solvent Naphtha, Light Aromatic	R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

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.
Contaminated packaging	:	Can be used after re-conditioning. Empty remaining contents. It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations.
European Waste Catalogue	:	waste isocyanates packaging containing residues of or contaminated by dangerous substances

14. TRANSPORT INFORMATION

ADR	:	UN-Number	**1263**
		Class	3
		Packing instruction (LQ)	F1
		Packaging group	III
		Description of the goods	PAINT RELATED MATERIAL
IMDG	:	UN-Number	**1263**
		Class	3
		EmS	F - E, S - E
		Packaging group	III
		Description of the goods	PAINT RELATED MATERIAL
IATA		UN-Number	**1263**
		Class	3
		Packaging group	III
		Description of the goods	Paint related material

15. REGULATORY INFORMATION

Hazardous components which must be listed on the label:

- Polysocyanate HDI Derivative

Symbol(s)	:	Xn	Harmful
R-phrase(s)	:	R10	Flammable.
		R42/43	May cause sensitization by inhalation and skin contact.
		R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
		R66	Repeated exposure may cause skin dryness or cracking.
		R67	Vapours may cause drowsiness and dizziness.
S-phrase(s)	:	S23	Do not breathe vapour.
		S36/37	Wear suitable protective clothing and gloves.
		S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
		S60	This material and its container must be disposed of as hazardous waste.
Special labelling of certain preparations	:		
Special labelling of certain preparations	:	Contains isocyanates. See information supplied by the manufacturer.	

National legislation

Germany

Risk classification according to BetrSichV (Germany)	:	Exempt
Water contaminating class (Germany)	:	WGK 2 water endangering

16. OTHER INFORMATION

Further information

Xylene	R20/21	Harmful by inhalation and in contact with skin.
	R38	Irritating to skin.
	R10	Flammable.
N-Butyl Acetate	R10	Flammable.
	R66	Repeated exposure may cause skin dryness or cracking.
	R67	Vapours may cause drowsiness and dizziness.
isobutyl acetate	R11	Highly flammable.
	R66	Repeated exposure may cause skin dryness or cracking.
2-Methoxy-1-Methylethyl Acetate	R10	Flammable.
	R36	Irritating to eyes.

Solvent Naphtha, Light Aromatic	R37	Irritating to respiratory system.
	R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	R10	Flammable.
	R66	Repeated exposure may cause skin dryness or cracking.
	R67	Vapours may cause drowsiness and dizziness.
	R65	Harmful: may cause lung damage if swallowed.
Polysocyanate HDI Derivative	R42/43	May cause sensitization by inhalation and skin contact.
	R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Dibutyl Tin Dilaurate	R60	May impair fertility.
	R61	May cause harm to the unborn child.
	R22	Harmful if swallowed.
	R36/38	Irritating to eyes and skin.
	R48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed.
	R68	Possible risk of irreversible effects.
	R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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.

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This safety datasheet has been prepared according to European Union legislation.