

HS HARDENER SPEEDY

Version 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product information**

Product name : HS HARDENER SPEEDY

Product code : ZP-3006a

Company : Zero Paints
Unit 59 Basepoint Business Centre
Oakfield Close
Tewkesbury, Glos, GL20 8SD

Telephone : +44 07977 125967

In order to get more information and in case of emergencies please address to Lechler Group Security Office. (Tel. +39-031-586.301).

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Polyisocyanic compound

Hazardous components :

Components	CAS-No.	EEC-No.	Symbol(s)	R-phrases(s)	Concentration [%]
Xylene	1330-20-7	601-022-00-9	Xn	R20/21, R38, R10	>= 30 - < 50
N-Butyl Acetate	123-86-4	607-025-00-1		R10, R66, R67	>= 7 - < 10
2-Methoxy-1-Methylethyl Acetate	108-65-6	607-195-00-7	Xi	R10, R36	>= 5 - < 7
Naphtha Hydrodesulfurized Heavy	64742-82-1	649-330-00-2	Xn, N	R65, R51/53, R10	>= 1 - < 3
Polyisocyanate HDI Derivative	28182-81-2		Xi	R43, R52/53	>= 30 - < 50

3. HAZARDS IDENTIFICATION

Harmful

Hazardous components : XylenePolyisocyanate HDI Derivative

R-phrases(s) :

Flammable.

Harmful by inhalation and in contact with skin.

Irritating to skin.

May cause sensitization by skin contact.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases(s) :

Do not breathe spray.

Avoid contact with skin.

Wear suitable protective clothing and gloves.

Exceptional labelling of special preparations :

Contains isocyanates. See information supplied by the manufacturer.

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.

After 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.

After 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

After Eye contact : Irrigate copiously with clean, fresh water for at least 10 minutes,
holding the eyelids apart.
Remove contact lenses.
Seek medical advice.
Put eye-washer on working place

After Ingestion : If accidentally swallowed obtain immediate medical attention.
Keep at rest.
Do not induce vomiting.

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 must 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

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 and collect spillage 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).

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° and 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	150,00	
2-Methoxy-1-Methylethyl Acetate	108-65-6	275,00	50,00	
Naphtha Hydrodesulfurized Heavy	64742-82-1	350,00	100,00	

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.
- 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
- 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

Version 2

Print Date 06/02/2006

Form	:	liquid
Flash point	:	> 23 - 55 °C
Density	:	0,97 g/cm ³
Viscosity	:	<= 60 s Transversale section: 6 mm Method: 2431 '84 (ISO 6)
Solids by weight	:	39 %

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 CO ₂ .

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.
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

Naphtha Hydrodesulfurized Heavy

ACUTE: INHALATION: Vapor concentration above recommended exposure levels may be irritating to the eyes and the respiratory 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 not 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

: 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.

Naphtha Hydrodesulfurized Heavy

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.

14. TRANSPORT INFORMATION

ADR	:	UN-No	1263
		Class	3
		Code	F1
		Packaging group	III
		Description of the goods	PAINT RELATED MATERIAL

IMDG	:	UN-No	1263
		Class	3
		EmS	F-E, S-E
		Packaging group	III
		Description of the goods	PAINT RELATED MATERIAL
IATA	:	UN-No	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:

- Xylene
- Polyisocyanate HDI Derivative

Symbol(s)	:	Xn	Harmful
R-phrase(s)	:	R10 R20/21 R38 R43 R52/53	Flammable. Harmful by inhalation and in contact with skin. Irritating to skin. May cause sensitization by skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	:	S23 S24 S36/37	Do not breathe spray. Avoid contact with skin. Wear suitable protective clothing and gloves.
Exceptional labelling of special preparations	:		
Exceptional labelling of special preparations	:	Contains isocyanates. See information supplied by the manufacturer.	
National legislation			
<u>Germany</u>			
Risk classification according to BetrSichV (Germany)	:	AII	
Water contaminating class (Germany)	:	water endangering	
Acute toxicity (other route)	:	Isocyanates may cause acute irritation and/or sensitisation of the respiratory system leading to tightness of the chest, wheeziness and an asthmatic condition.	

16. OTHER INFORMATION

Further information

SAFETY DATA SHEET according to EC directive 2001/58/EC**HS HARDENER SPEEDY**

Version 2

Print Date 06/02/2006

Xylene	R20/21 R38 R10	Harmful by inhalation and in contact with skin. Irritating to skin. Flammable.
N-Butyl Acetate	R10 R66 R67	Flammable. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.
2-Methoxy-1-Methylethyl Acetate	R10 R36	Flammable. Irritating to eyes.
Naphtha Hydrodesulfurized Heavy	R65 R51/53 R10	Harmful: may cause lung damage if swallowed. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Flammable.
Polyisocyanate HDI Derivative	R43 R52/53	May cause sensitization by skin contact. Harmful 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.

Version: 2.10

Revision date 05.07.2005

SDS updated to the last adjustment of EEC directive 67/548/CE, 1999/45/CE.