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Safety data sheet according to 1907/2006/EC, Article 31

Printing date 24.09.2019

Revision: 19.09.2019

SECTION 1: Identification of the substance/mixture and of the company/ undertaking			
· 1.1 Product identifier HARDENERS			
· Trade name: <u>H060 2K HARDENER NORMAL</u>			
 Article number: H060 1.2 Relevant identified uses of the substance or mixture and uses advised against Use as paint hardener Sector of Use SU3 Industrial Uses: Uses of substances such as or in preparations at industrial sites SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen) Product category PC9a Coatings and paints, thinners, paint removers PC9b Fillers, putties, plasters, modelling clay Application of the substance / the mixture refer to the relevant Technical Data Sheet 			
 • 1.3 Details of the supplier of the safety data sheet General Paint Co. S.A.L -Safety Department- 			
For further information, please consult our Internet site www.hymax.biz • <i>Manufacturer/Supplier:</i> P.O. Box 7623 Beirut LEBANON info@hymax.biz Générale de Peinture, 70 Rue Cortambert 75116 Paris, France Tel:+33(0)175293559			
 Further information obtainable from: Product Safety Department 1.4 Emergency telephone number: +33 (0)6 07 87 13 41 During normal opening times:(961) 9 925990 /1/2 			
SECTION 2: Hazards identification			
 2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 			



Flammable liquid and vapour.

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Acute Tox. 4	H312 Harmful in contact with skin.
Acute Tox. 4	H332 Harmful if inhaled.
Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2	H319 Causes serious eye irritation.
•	H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.
2.2 Label ele	
	cording to Regulation (EC) No 1272/2008 is classified and labelled according to the CLP regulation.
Hazard picto	
nazaru picio	grams
\wedge	A
<	
	•
GHS02 GH	1S07
Signal word	Warning
Honord data	univing components of loballing.
	rmining components of labelling:
	er of hexamethylene diisocyanate
xylene	
n-butyl aceta	to
Hazard state	
Hazard state	ements
H226	e ments Flammable liquid and vapour.
H226 H312+H332	ements Flammable liquid and vapour. Harmful in contact with skin or if inhaled.
H226 H312+H332 H315	ements Flammable liquid and vapour. Harmful in contact with skin or if inhaled. Causes skin irritation.
H226 H312+H332 H315 H319	ements Flammable liquid and vapour. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation.
H226 H312+H332 H315 H319 H335-H336	ements Flammable liquid and vapour. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.
H226 H312+H332 H315 H319 H335-H336 Precautiona	ements Flammable liquid and vapour. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. ry statements
H226 H312+H332 H315 H319 H335-H336 Precautiona P101	ements Flammable liquid and vapour. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. my statements If medical advice is needed, have product container or label at hand.
H226 H312+H332 H315 H319 H335-H336 Precautiona	Flammable liquid and vapour. Flammable liquid and vapour. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May cause respiratory irritation. May cause drowsiness or dizziness. ry statements If medical advice is needed, have product container or label at hand. Keep out of reach of children.
H226 H312+H332 H315 H319 H335-H336 Precautiona P101	ements Flammable liquid and vapour. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May cause respiratory irritation. May cause drowsiness or dizziness. ry statements If medical advice is needed, have product container or label at hand.
H226 H312+H332 H315 H319 H335-H336 Precautiona P101 P102	Flammable liquid and vapour. Flammable liquid and vapour. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May cause respiratory irritation. May cause drowsiness or dizziness. ry statements If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use.
H226 H312+H332 H315 H319 H335-H336 Precautiona P101 P102 P103	Flammable liquid and vapour. Flammable liquid and vapour. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. ry statements If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources
H226 H312+H332 H315 H319 H335-H336 Precautiona P101 P102 P103 P210	Flammable liquid and vapour. Flammable liquid and vapour. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. ry statements If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources No smoking.
H226 H312+H332 H315 H319 H335-H336 Precautiona P101 P102 P103 P210 P241	Flammable liquid and vapour. Flammable liquid and vapour. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. ry statements If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Keep away from heat, hot surfaces, sparks, open flames and other ignition source. No smoking. Use explosion-proof electrical/ventilating/lighting equipment.
H226 H312+H332 H315 H319 H335-H336 Precautiona P101 P102 P103 P210 P241	Flammable liquid and vapour. Flammable liquid and vapour. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. ry statements If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical/ventilating/lighting equipment. -P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse ski
H226 H312+H332 H315 H319 H335-H336 Precautiona P101 P102 P103 P210 P241 P303+P361+	 Flammable liquid and vapour. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. ry statements If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical/ventilating/lighting equipment. P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse ski with water/shower.
H226 H312+H332 H315 H319 H335-H336 Precautiona P101 P102 P103 P210 P241 P303+P361+	 Flammable liquid and vapour. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. ry statements If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical/ventilating/lighting equipment. P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse ski with water/shower. P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove container
H226 H312+H332 H315 H319 H335-H336 Precautiona P101 P102 P103 P210 P241 P303+P361+	Flammable liquid and vapour. Flammable liquid and vapour. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. ry statements If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical/ventilating/lighting equipment. -P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse ski



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Store locked up. Dispose of contents/container in accordance with local/regional/national/ international regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:				
28182-81-2	Homopolymer of hexamethylene diisocyanate Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	>25- <i>≤</i> 50%		
1330-20-7	xylene � Flam. Liq. 3, H226; � Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	>25- <i>≤</i> 50%		
123-86-4	n-butyl acetate 🚸 Flam. Liq. 3, H226; 🚸 STOT SE 3, H336	>10- <i>≤</i> 25%		
· Additional	information: For the wording of the listed hazard phrases refer to section 16.	·		

SECTION 4: First aid measures

· 4.1 Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

• After skin contact: Immediately wash with water and soap and rinse thoroughly.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. • After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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• **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available. (Contd. of page 3)

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

- · Suitable extinguishing agents:
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.
- · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

• 6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

6.4 Reference to other sections
 See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
- Information about fire and explosion protection: Keep ignition sources away - Do not smoke. Protect against electrostatic charges.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.

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· Storage class: 3

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

1330-20-7 xylene

IOELV (EU) Short-term value: 442 mg/m³, 100 ppm Long-term value: 221 mg/m³, 50 ppm Skin

· Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye protection:

Tightly sealed goggles

SECTION 9: Physical and chemical properties

General Information	
Appearance:	
Form:	Liquid
Colour:	Clear
Odour:	Characteristic National communication
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling rar	nge: 124 °C
Flash point:	25 °C
Flammability (solid, gas):	Not applicable.
Ignition temperature:	370 °C
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Explosion limits:	
Lower:	1.1 Vol %
Upper:	7.5 Vol %
Vapour pressure at 20 °C:	10.7 hPa
Density at 20 °C:	0.98 g/cm³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.



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 Solubility in / Miscibility with water: 	Not miscible or difficult to mix.	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	52.2 %	
VÕC (EC)	511.3 g/l	
Solids content:	47.6 %	
· 9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity

Harmful in contact with skin or if inhaled.

· LD/LC50 values relevant for classification:

1330-20-7 xylene

Oral LD50 4,300 mg/kg (rat)

Dermal LD50 2,000 mg/kg (rabbit)

- · Primary irritant effect:
- · Skin corrosion/irritation
- Causes skin irritation.
- · Serious eye damage/irritation
- Causes serious eye irritation.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

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- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure
- May cause respiratory irritation. May cause drowsiness or dizziness.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small guantities leak into the ground.

- · 12.5 Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA

UN1263

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14.2 UN proper shipping name	(Contd. of page 8
ADR IMDG, IATA	1263 PAINT PAINT
• 14.3 Transport hazard class(es) • ADR, IMDG, IATA	
Class Label	3 Flammable liquids. 3
14.4 Packing group ADR, IMDG, IATA	<i>III</i>
14.5 Environmental hazards: Marine pollutant:	No
 14.6 Special precautions for user Danger code (Kemler): EMS Number: Stowage Category 	Warning: Flammable liquids. 30 F-E, <u>S-E</u> A
14.7 Transport in bulk according to Ann Marpol and the IBC Code	ex II of Not applicable.
Transport/Additional information:	
ADR Limited quantities (LQ) Excepted quantities (EQ) Transport category	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 m 3
Tunnel restriction code	J/E
IMDG Limited quantities (LQ) Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 m
UN "Model Regulation":	UN 1263 PAINT, 3, III

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SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P5c FLAMMABLE LIQUIDS
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H226 Flammable liquid and vapour.

- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

- · Department issuing SDS: Product safety department
- · Contact: N/A
- Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

- Acute Tox. 4: Acute toxicity Category 4 Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3