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1 Identification

- · Product identifier
- · Trade name: H07085 ZERO VOC HARDENER NORMAL
- · Article number: HO7085
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier: General Paint Co. S.A.L. P.O. Box 7623 Beirut LEBANON info@generalpaint.biz
- Information department: Product Safety Department
 Emergency telephone number: 1-800-535-5053 contract number (89244)

2 Hazard(s) identification

· Classification of the substance or mixture

GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.

GHS07

Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

· Label elements

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



- · Signal word Warning
- Hazard-determining components of labeling: Homopolymer of hexamethylene diisocyanate
- **Hazard statements** Flammable liquid and vapor.

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(Contd. of page 1) Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. · Precautionary statements Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapors/spray Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. Specific treatment (see on this label). Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. In case of fire: Use for extinction: CO2, powder or water spray. Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. Classification system: · NFPA ratings (scale 0 - 4) Health = 2Fire = 2Reactivity = 0· HMIS-ratings (scale 0 - 4) HEALTH 2 Health = 2FIRE 2 Fire = 2Reactivity = 0REACTIVITY 0 · Other hazards · Results of PBT and vPvB assessment · PBT: Not applicable. · vPvB: Not applicable.



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>50-*≤*100%

>25-*≤*50%

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3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:
 - 98-56-6 4-chloro-alpha,alpha,alpha-trifluorotoluene
- 28182-81-2 Homopolymer of hexamethylene diisocyanate

4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: 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.

- · Information for doctor:
- *Most important symptoms and effects, both acute and delayed* No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. • For safety reasons unsuitable extinguishing agents: Water with full jet

- · Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

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

• 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.

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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. Protective Action Criteria for Chemicals

· PAC-1:				
28182-81-2	Homopolymer of hexamethylene diisocyanate	7.8 mg/m ³		
822-06-0	hexamethylene-di-isocyanate	0.018 ppm		
· PAC-2:				
	Homopolymer of hexamethylene diisocyanate	86 mg/m³		
822-06-0	hexamethylene-di-isocyanate	0.2 ppm		
· PAC-3:				
	Homopolymer of hexamethylene diisocyanate	510 mg/m³		
822-06-0	hexamethylene-di-isocyanate	3 ррт		

7 Handling and storage

· Handling:

- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
- Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Protect against electrostatic charges.
- · 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 receptacle tightly sealed.
- · Storage class: 3
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

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

- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

• Additional information: The lists that were valid during the creation were used as basis.

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- 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.
- · Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· 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.

• Eye protection:



Tightly sealed goggles

	sical and chemical properties	
· General Information		
· Appearance:		
Form:	Liquid	
Color:	Clear	
· Odor:	Characteristic	

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· Odor threshold:	Not determined.
· pH-value:	Not determined.
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	Undetermined. 139 °C (282.2 °F)
· Flash point:	47 °C (116.6 °F)
· Flammability (solid, gaseous):	Not applicable.
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/ vapor mixtures are possible.
 Explosion limits: Lower: Upper: 	Not determined. Not determined.
· Vapor pressure:	Not determined.
 Density at 20 °C (68 °F): Relative density Vapor density Evaporation rate 	1.215 g/cm³ (10.13918 lbs/gal) Not determined. Not determined. Not determined.
 Solubility in / Miscibility with Water: 	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/wate	er): Not determined.
 Viscosity: Dynamic: Kinematic: 	Not determined. Not determined.
 Solvent content: Organic solvents: Coating VOC content: Material VOC content: 	56.8 % 0.00 % 0.0 g/l / 0.00 lb/gal 0.0 g/l / 0.00 lb/gal
Solids content: • Other information	43.1 % No further relevant information available.

10 Stability and reactivity

· Reactivity No further relevant information available.

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

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

- · IARC (International Agency for Research on Cancer)
- None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

- · OSHA-Ca (Occupational Safety & Health Administration)
- None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:
- Water hazard class 2 (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 quantities leak into the ground.

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· Results of PBT and vPvB assessment

• **PBT:** Not applicable.

· vPvB: Not applicable.

• Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

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

· Uncleaned packagings:

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

· UN-Number · DOT, ADR, IMDG, IATA UN1263 · UN proper shipping name · DOT Paint · ADR 1263 PAINT, ENVIRONMENTALLY HAZARDOUS · IMDG, IATA PAINT · Transport hazard class(es) · DOT · Class 3 Flammable liquids · Label 3 · ADR, IMDG, IATA · Class 3 Flammable liquids · Label 3 · Packing group · DOT, ADR, IMDG, IATA $\parallel \parallel$ (Contd. on page 9) US



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 Environmental hazards: Marine pollutant: 	No
· Special precautions for user	Warning: Flammable liquids
Danger code (Kemler):	30
· EMS Number:	F-E, <u>S-E</u>
· Stowage Category	A
· Transport in bulk according to Annex	r II of
MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
·DOT	
· Quantity limitations	On passenger aircraft/rail: 60 L
	On cargo aircraft only: 220 L
· ADR	
 Excepted quantities (EQ) 	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
·IMDG	
 Limited quantities (LQ) 	5L
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1263 PAINT, 3, III, ENVIRONMENTALL HAZARDOUS

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

· Section 355 (extremely hazardous substances):				
None of the ingredients is listed.				
· Section 313	B (Specific toxic chemical listings):			
822-06-0 he	examethylene-di-isocyanate			
TSCA (Toxic Substances Control Act):				
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene	ACTIVE		
28182-81-2	Homopolymer of hexamethylene diisocyanate	ACTIVE		
822-06-0	hexamethylene-di-isocyanate	ACTIVE		
4083-64-1	4-isocyanatosulphonyltoluene	ACTIVE		
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· Hazardous Air Pollutants

822-06-0 hexamethylene-di-isocyanate

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS). • Hazard pictograms



· Signal word Warning

- · Hazard-determining components of labeling: Homopolymer of hexamethylene diisocyanate
- Hazard statements Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Precautionary statements
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 Ground/bond container and receiving equipment.
 Use explosion-proof electrical/ventilating/lighting/equipment.
 Use only non-sparking tools.
 Take precautionary measures against static discharge.

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Trade name: H07085 ZERO VOC HARDENER NORMAL

(Contd. of page 10) Avoid breathing dust/fume/gas/mist/vapors/spray Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. Specific treatment (see on this label). Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. In case of fire: Use for extinction: CO2, powder or water spray. Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

· Department issuing SDS: Product safety department

- · Contact: N/A
- · Date of preparation / last revision 09/12/2019 / -

· 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 DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists 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) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Flam. Lig. 3: Flammable liquids - Category 3

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Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A STOT SE 3: Specific target organ toxicity (single exposure) – Category 3



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