

Printing date 12.10.2013

Revision: 14.08.2012

| 1 Product and Company Identification       |  |
|--|--|
| · Product identifier HARDENERS             |  |
| · Trade name: <u>H070 2K HARDENER SLOW</u> |  |

- · Article number: H070
- Relevant identified uses of the substance or mixture and uses advised against Use as paint hardener
- · Application of the substance / the preparation refer to the relevant Technical Data Sheet
- **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.generalpaint.biz Manufacturer/Supplier:

General Paint Co. SAL TURBO P.O. Box 7623 Beirut LEBANON info@generalpaint.biz

- · Further information obtainable from: Product safety department
- · Emergency telephone number: During normal opening times: (961) 9 925990 /1/2

## 2 Hazards identification

· Classification of the substance or mixture

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; Harmful

R20/21: Harmful by inhalation and in contact with skin.

🗙 Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

- R10: Flammable.
- Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

### · Label elements

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:



Xn Harmful

 Hazard-determining components of labelling: Homopolymer of hexamethylene diisocyanate xylene

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- · Risk phrases:
- 10 Flammable.

20/21 Harmful by inhalation and in contact with skin. 36/37/38 Irritating to eyes, respiratory system and skin.

### · Safety phrases:

2 Keep out of the reach of children.

36/37 Wear suitable protective clothing and gloves.

- 46 If swallowed, seek medical advice immediately and show this container or label.
- 56 Dispose of this material and its container to hazardous or special waste collection point.

### · Special labelling of certain preparations:

Contains isocyanates. See information supplied by the manufacturer

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

## 3 Composition/information on ingredients

· Chemical characterization: Mixtures

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

| · Dangerous  | components:  |        |
|--------------|--|--------|
| 28182-81-2   | Homopolymer of hexamethylene diisocyanate<br>Xn R20/21; 🗙 Xi R36/37/38       | 25-50% |
| 1330-20-7    | xylene<br>▇ Xn R20/21; <mark>厥</mark> Xi R38<br>R10                          | 25-50% |
| 108-65-6     | 2-methoxy-1-methylethyl acetate<br>R10                                       | 10-25% |
| · Additional | information: For the wording of the listed risk phrases refer to section 16. | ,      |

## 4 First aid measures

- · Description of first aid measures
- General information: 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.
- · 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.

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### 5 Firefighting measures

- · Extinguishing media
- Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · 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: Mouth respiratory protective device.

## 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.

Do not flush with water or aqueous cleansing agents

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.

### 7 Handling and storage

### · Handling:

- **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.
- · 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.
- · Storage class: 3
- · Specific end use(s) No further relevant information available.

## 8 Exposure controls/personal protection

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

· Control parameters

| • • • • • • •                   |  |                    |
|---------------------------------|--|--------------------|
| <ul> <li>Ingredients</li> </ul> | s with limit values that require monitoring at the workplace:                        |                    |
| 1330-20-7 x                     | cylene   |                    |
| IOELV (EU)                      | ) Short-term value: 442 mg/m³, 100 ppm<br>Long-term value: 221 mg/m³, 50 ppm<br>Skin |                    |
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|---------------|--|
| 108-65-6 2-n  | nethoxy-1-methylethyl acetate  |
|               | Short-term value: 550 mg/m³, 100 ppm   |
| .0221 (20)    | Long-term value: 275 mg/m <sup>3</sup> , 50 ppm  |
|               | Skin   |
| Additional i  | <b>nformation:</b> The lists valid during the making were used as basis.                 |
| Exposure co   | ontrols  |
|               | otective equipment:  |
|               | tective and hygienic measures:   |
|               | rom foodstuffs, beverages and feed.  |
|               | remove all soiled and contaminated clothing  |
|               | before breaks and at the end of work.  |
|               | t with the eyes and skin.  |
| Respiratory   |  |
|               | ief exposure or low pollution use respiratory filter device. In case of intensive or lon |
|               | e self-contained respiratory protective device.  |
| Protection of |  |
|               |  |
| un m          |  |
| Pr            | otective gloves  |
|               |  |
| The glove r   | natorial has to be impermeable and resistant to the product/ the substance/              |
| preparation.  | naterial has to be impermeable and resistant to the product/ the substance/              |
|               | ing tests no recommendation to the glove material can be given for the product/          |
|               | the chemical mixture.  |
|               | the glove material on consideration of the penetration times, rates of diffusion and     |
| degradation   |  |
| Material of g | Novos  |
|               | n of the suitable gloves does not only depend on the material, but also on further ma    |
|               | d varies from manufacturer to manufacturer. As the product is a preparation of seve      |
|               | the resistance of the glove material can not be calculated in advance and has theref     |
|               | d prior to the application.  |
|               | time of glove material   |
|               | eak through time has to be found out by the manufacturer of the protective gloves a      |
| has to be ob  |  |
| Eye protect   |  |
| Lye protecti  |  |
|               |  |
| 🛛 🕲 🐨 🖉 Tig   | ghtly sealed goggles   |
|               |  |
|               |  |
|               |  |
| Physical a    | and chemical properties  |
|               |  |

· General Information

| · Appearance:                |                 |  |
|------------------------------|-----------------|--|
| Form:                        | Fluid           |  |
| Colour:                      | Clear           |  |
| · Odour:                     | Characteristic  |  |
| · Odour threshold:           | Not determined. |  |
| · pH-value:                  | Not determined. |  |
| · Change in condition        |                 |  |
| Melting point/Melting range: | Undetermined.   |  |

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|---------------------------------------|--|
| Boiling point/Boiling range:          | 137 °C                                     |
| · Flash point:                        | 25 °C                                      |
| · Flammability (solid, gaseous):      | Not applicable.                            |
| Ignition temperature:                 | 315 ℃                                      |
| Decomposition temperature:            | Not determined.                            |
| · Self-igniting:                      | Product is not selfigniting.               |
| Danger of explosion:                  | NONE                                       |
| Explosion limits:                     |  |
| Lower:                                | 1.1 Vol %                                  |
| Upper:                                | 10.8 Vol %                                 |
| · Vapour pressure at 20 °C:           | 6.7 hPa                                    |
| · Density at 20 °C:                   | 1.012 g/cm <sup>3</sup>                    |
| · Relative density                    | Not determined.                            |
| · Vapour density                      | Not determined.                            |
| · Evaporation rate                    | Not determined.                            |
| · 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 %                                     |
| VOC (EC)                              | 528.3 g/l                                  |
| Solids content:                       | 47.7 %                                     |
| <ul> <li>Other information</li> </ul> | No further relevant information available. |

### 10 Stability and reactivity

- · Reactivity
- · 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:

· LD/LC50 values relevant for classification:

1330-20-7 xylene

Oral LD50 4300 mg/kg (rat)

Dermal LD50 2000 mg/kg (rabbit)

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- · 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 the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Harmful

Irritant

### 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour 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 (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 quantities leak into the ground.

- · 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 together with household garbage. Do not allow product to reach sewage system.

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

| UN-Number<br>ADR, IMDG, IATA | UN1263               |  |
|------------------------------|----------------------|--|
| ADR, INDO, IATA              | 011/203              |  |
| UN proper shipping name      |                      |  |
| ADR                          | 1263 PAINT           |  |
| IMDG, IATA                   | PAINT                |  |
| Transport hazard class(es)   |                      |  |
| ADR, IMDG, IATA              |                      |  |
| AUN, INIDO, IATA             |                      |  |
|                              |                      |  |
|                              |                      |  |
|                              |                      |  |
|                              |                      |  |
| Class                        | 3 Flammable liquids. |  |



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| Label   | 3  |      |
| · Packing group<br>· ADR, IMDG, IATA  | <i>III</i>   |      |
| Environmental hazards:<br>Marine pollutant:   | No   |      |
| • Special precautions for user<br>• Danger code (Kemler):<br>• EMS Number:                | Warning: Flammable liquids.<br>30<br>F-E, <u>S-E</u> |      |
| <ul> <li>Transport in bulk according to Annex<br/>MARPOL73/78 and the IBC Code</li> </ul> | T <b>II of</b><br>Not applicable.                    |      |
| · Transport/Additional information:   |  |      |
| · ADR<br>· Limited quantities (LQ)<br>· Transport category<br>· Tunnel restriction code   | 5L<br>3<br>D/E                                       |      |

## 15 Regulatory information

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## 6 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

R10 Flammable.
R20/21 Harmful by inhalation and in contact with skin.
R36/37/38 Irritating to eyes, respiratory system and skin.
R38 Irritating to skin.

· Department issuing MSDS: Product safety department

· Contact: Ms. Topaljikian

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