

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

Printing date 25.09.2019

Revision: 19.09.2019

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name: H088 2K L.E. HARDENER FLOW**
- **Article number: H088**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
use as industrial paint
- **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**
- **Manufacturer/Supplier:**  
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

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

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· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

*The product is classified and labelled according to the CLP regulation.*

· **Hazard pictograms**



GHS02 GHS07

· **Signal word** *Warning*

· **Hazard-determining components of labelling:**

*Homopolymer of hexamethylene diisocyanate*

*Solvent naphtha (petroleum), light arom.*

*xylene*

*2-butoxyethyl acetate*

· **Hazard statements**

*H226 Flammable liquid and vapour.*

*H332 Harmful if inhaled.*

*H315 Causes skin irritation.*

*H319 Causes serious eye irritation.*

*H335 May cause respiratory irritation.*

· **Precautionary statements**

*P101 If medical advice is needed, have product container or label at hand.*

*P102 Keep out of reach of children.*

*P103 Read label before use.*

*P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.  
No smoking.*

*P241 Use explosion-proof electrical/ventilating/lighting equipment.*

*P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*

*P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

*P405 Store locked up.*

*P501 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.*

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### SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

|  |   |           |
|--|---|-----------|
| CAS: 28182-81-2<br>Reg.nr.: 01-2119485796-17   | Homopolymer of hexamethylene diisocyanate<br>⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 | >25-≤50%  |
| CAS: 108-65-6<br>EINECS: 203-603-9<br>Reg.nr.: 01-2119475791-29<br>05-2116413226-56                      | 2-methoxy-1-methylethyl acetate<br>⚠ Flam. Liq. 3, H226   | >10-≤25%  |
| CAS: 64742-95-6<br>EINECS: 265-199-0<br>Reg.nr.: 01-2119455851-35<br>05-2116598517-27                    | Solvent naphtha (petroleum), light arom.<br>⚠ Acute Tox. 4, H332; STOT SE 3, H335   | >10-≤25%  |
| CAS: 1330-20-7<br>EINECS: 215-535-7<br>Reg.nr.: 01-2119486136-34<br>05-2116602925-45<br>01-2119488216-32 | xylene<br>⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315   | >10-≤25%  |
| CAS: 112-07-2<br>EINECS: 203-933-3<br>Reg.nr.: 01-2119475112-47  | 2-butoxyethyl acetate<br>⚠ Acute Tox. 4, H312; Acute Tox. 4, H332   | >2.5-≤10% |

- **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.

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- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, 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.

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- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **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:**

**108-65-6 2-methoxy-1-methylethyl acetate**

|     |  |
|-----|--|
| WEL | Short-term value: 548 mg/m <sup>3</sup> , 100 ppm<br>Long-term value: 274 mg/m <sup>3</sup> , 50 ppm<br>Sk |
|-----|--|

**1330-20-7 xylene**

|     |  |
|-----|--|
| WEL | Short-term value: 441 mg/m <sup>3</sup> , 100 ppm<br>Long-term value: 220 mg/m <sup>3</sup> , 50 ppm<br>Sk; BMGV |
|-----|--|

**112-07-2 2-butoxyethyl acetate**

|     |   |
|-----|---|
| WEL | Short-term value: 332 mg/m <sup>3</sup> , 50 ppm<br>Long-term value: 133 mg/m <sup>3</sup> , 20 ppm<br>Sk |
|-----|---|

· **Ingredients with biological limit values:**

**1330-20-7 xylene**

|      |  |
|------|--|
| BMGV | 650 mmol/mol creatinine<br>Medium: urine<br>Sampling time: post shift<br>Parameter: methyl hippuric acid |
|------|--|

- **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.

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· **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

### SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

|                         |                                  |
|-------------------------|----------------------------------|
| <b>Form:</b>            | Fluid                            |
| <b>Colour:</b>          | According to product description |
| <b>Odour:</b>           | Characteristic                   |
| <b>Odour threshold:</b> | Not determined.                  |

· **pH-value:** Not determined.

· **Change in condition**

|   |               |
|---|---------------|
| <b>Melting point/freezing point:</b>            | Undetermined. |
| <b>Initial boiling point and boiling range:</b> | 124 °C        |

· **Flash point:** 25 °C

· **Flammability (solid, gas):** Not applicable.

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|  |   |
|--|---|
| · <b>Ignition temperature:</b>                   | 280 °C  |
| · <b>Decomposition temperature:</b>              | Not determined.   |
| · <b>Auto-ignition temperature:</b>              | Product is not selfigniting.  |
| · <b>Explosive properties:</b>                   | Product is not explosive. However, formation of explosive air/vapour mixtures are possible. |
| · <b>Explosion limits:</b>                       |   |
| <b>Lower:</b>                                    | 0.7 Vol %   |
| <b>Upper:</b>                                    | 10.8 Vol %  |
| · <b>Vapour pressure at 20 °C:</b>               | 6.7 hPa   |
| · <b>Density at 20 °C:</b>                       | 1.008 g/cm <sup>3</sup>   |
| · <b>Relative density</b>                        | Not determined.   |
| · <b>Vapour density</b>                          | Not determined.   |
| · <b>Evaporation rate</b>                        | Not determined.   |
| · <b>Solubility in / Miscibility with water:</b> | Not miscible or difficult to mix.   |
| · <b>Partition coefficient: n-octanol/water:</b> | Not determined.   |
| · <b>Viscosity:</b>                              |   |
| <b>Dynamic:</b>                                  | Not determined.   |
| <b>Kinematic:</b>                                | Not determined.   |
| · <b>Solvent content:</b>                        |   |
| <b>Organic solvents:</b>                         | 62.9 %  |
| <b>VOC (EC)</b>                                  | 634.4 g/l   |
| <b>Solids content:</b>                           | 61.8 %  |
| · <b>9.2 Other information</b>                   | 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.

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- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity**  
Harmful if inhaled.

- **LD/LC50 values relevant for classification:**

#### 64742-95-6 Solvent naphtha (petroleum), light arom.

|            |          |                    |
|------------|----------|--------------------|
| Oral       | LD50     | >6,800 mg/kg (rat) |
| Dermal     | LD50     | >3,400 mg/kg (rab) |
| Inhalative | LC50/4 h | >10.2 mg/l (rat)   |

#### 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.
- **CMR effects (carcinogenicity, 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.
- **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

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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.

· **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

· **14.2 UN proper shipping name**

· **ADR**

1263 PAINT

· **IMDG, IATA**

PAINT

· **14.3 Transport hazard class(es)**

· **ADR, IMDG, IATA**



· **Class**

3 Flammable liquids.

· **Label**

3

· **14.4 Packing group**

· **ADR, IMDG, IATA**

III

· **14.5 Environmental hazards:**

· **Marine pollutant:**

No

· **14.6 Special precautions for user**

Warning: Flammable liquids.

· **Danger code (Kemler):**

30

· **EMS Number:**

F-E,S-E

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|  |  |
|--|--|
| · <b>Stowage Category</b>  | A  |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable.  |
| · <b>Transport/Additional information:</b>                                       |  |
| -----  |  |
| · <b>ADR</b>   |  |
| · <b>Limited quantities (LQ)</b>   | 5L   |
| · <b>Excepted quantities (EQ)</b>  | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>Transport category</b>  | 3  |
| · <b>Tunnel restriction code</b>   | D/E  |
| -----  |  |
| · <b>IMDG</b>  |  |
| · <b>Limited quantities (LQ)</b>   | 5L   |
| · <b>Excepted quantities (EQ)</b>  | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>UN "Model Regulation":</b>  | UN 1263 PAINT, 3, III  |

### 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
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **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.

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H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.

· **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*