## Safety Data Sheet

acc. to OSHA HCS
Printing date 06/22/2023
Reviewed on 06/22/2023

## 1 Identification

- Product identifier
- Trade name: HO36 VOC HARDENER SLOW
- Article number: HO36

Application of the substance / the mixture refer to the relevant Technical Data Sheet
Details of the supplier of the safety data sheet
Manufacturer/Supplier:
General Paint Co. SAL
P.O. Box 7623

Beirut
LEBANON
info@hymax.biz

- Information department: Product Safety Department

Emergency telephone number:
1-800-535-5053 contract number (89244)
departamento de seguridad de los productos

## 2 Hazard(s) identification

Classification of the substance or mixture


GHSO2 Flame

Flammable Liquids 3


GHS08 Health hazard
Sensitization - Respiratory 1
Carcinogenicity 2


Skin Irritation 2
Eye Irritation 2A
Specific Target Organ

## Label elements

- GHS label elements

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

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- Signal word Danger
- Hazard-determining components of labeling:

4-chloro-alpha,alpha,alpha-trifluorotoluene
Homopolymer of hexamethylene diisocyanate
Isophorone Diisocyanate homopolymer
ethylbenzene
Hazard statements
Flammable liquid and vapor.
Causes skin irritation.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Suspected of causing cancer.
May cause respiratory irritation.

- Precautionary statements

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
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.
[In case of inadequate ventilation] wear respiratory 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.
IF exposed or concerned: Get medical advice/attention.
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.
If experiencing respiratory symptoms: Call a poison center/doctor.

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In case of fire: Use CO2, powder or water spray to extinguish.
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 $=2$
Fire $=3$
Reactivity $=0$
HMIS-ratings (scale 0-4)

| HEALTH |
| :--- |
| FIRE |

*2 Health = *2
3 Fire = 3
REACTIVITY 0 Reactivity $=0$

## 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 the substances listed below with nonhazardous additions.
- Dangerous components:

| $28182-81-2$ | Homopolymer of hexamethylene diisocyanate | $>25-\leq 50 \%$ |
| ---: | :--- | :---: |
| $98-56-6$ | 4-chloro-alpha, alpha, alpha-trifluorotoluene | $>25-\leq 50 \%$ |
| $53880-05-0$ | Isophorone Diisocyanate homopolymer | $>2.5-\leq 10 \%$ |
| $112-07-2$ | 2-butoxyethyl acetate | $>2.5-\leq 10 \%$ |
| $79-20-9$ | methyl acetate | $>2.5-\leq 10 \%$ |
| $108-65-6$ | 2-methoxy-1-methylethyl acetate | $\leq 2.5 \%$ |
| $100-41-4$ | ethylbenzene | $\leq 2.5 \%$ |

## 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.

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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 section 13.
Ensure adequate ventilation.
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 | $7.8 \mathrm{mg} / \mathrm{m}^{3}$ |
| ---: | :--- | :--- |
| $112-07-2$ | $2-$ butoxyethyl acetate | 15 ppm |
| $79-20-9$ | methyl acetate | 250 ppm |
| $108-65-6$ | 2 -methoxy-1-methylethyl acetate | 50 ppm |
| $1330-20-7$ | xylene | 130 ppm |

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| (Contd. of page 4) |  |  |
| :---: | :---: | :---: |
| 100-41-4 | ethylbenzene | 33 ppm |
| 822-06-0 | hexamethylene-di-isocyanate | 0.018 ppm |
| 4098-71-9 | 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate | 0.02 ppm |
| PAC-2: |  |  |
| 28182-81-2 | Homopolymer of hexamethylene diisocyanate | $86 \mathrm{mg} / \mathrm{m}^{3}$ |
| 112-07-2 | 2-butoxyethyl acetate | 35 ppm |
| 79-20-9 | methyl acetate | 1,700 ppm |
| 108-65-6 | 2-methoxy-1-methylethyl acetate | 1,000 ppm |
| 1330-20-7 | xylene | 920* ppm |
| 100-41-4 | ethylbenzene | 1100* ppm |
| 822-06-0 | hexamethylene-di-isocyanate | 0.2 ppm |
| 4098-71-9 | 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate | 0.14 ppm |
| PAC-3: |  |  |
| 28182-81-2 | Homopolymer of hexamethylene diisocyanate | $510 \mathrm{mg} / \mathrm{m}^{3}$ |
| 112-07-2 | 2-butoxyethyl acetate | 210 ppm |
| 79-20-9 | methyl acetate | 10000* ppm |
| 108-65-6 | 2-methoxy-1-methylethyl acetate | 5000* ppm |
| 1330-20-7 | xylene | 2500* ppm |
| 100-41-4 | ethylbenzene | 1800* ppm |
| 822-06-0 | hexamethylene-di-isocyanate | 3 ppm |
| 4098-71-9 | 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate | 0.6 ppm |

## 7 Handling and storage

## Handling:

- Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.

- Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.

- 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.


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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 section 7.

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

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

## 112-07-2 2-butoxyethyl acetate

REL $\quad$ Long-term value: $33 \mathrm{mg} / \mathrm{m}^{3}, 5 \mathrm{ppm}$
TLV Long-term value: 20 ppm
A3
79-20-9 methyl acetate
PEL $\quad$ Long-term value: $610 \mathrm{mg} / \mathrm{m}^{3}, 200 \mathrm{ppm}$
REL Short-term value: $760 \mathrm{mg} / \mathrm{m}^{3}, 250 \mathrm{ppm}$
Long-term value: $610 \mathrm{mg} / \mathrm{m}^{3}, 200 \mathrm{ppm}$
TLV Short-term value: 250 ppm
Long-term value: 200 ppm
108-65-6 2-methoxy-1-methylethyl acetate
WEEL Long-term value: 50 ppm
100-41-4 ethylbenzene
PEL $\quad$ Long-term value: $435 \mathrm{mg} / \mathrm{m}^{3}, 100 \mathrm{ppm}$
REL Short-term value: $545 \mathrm{mg} / \mathrm{m}^{3}, 125 \mathrm{ppm}$
Long-term value: $435 \mathrm{mg} / \mathrm{m}^{3}, 100 \mathrm{ppm}$
TLV Long-term value: 20 ppm
OTO, BEI, A3

- Ingredients with biological limit values:

100-41-4 ethylbenzene
BEI $0.15 \mathrm{~g} / \mathrm{g}$ creatinine
Medium: urine
Time: end of shift at end of workweek
Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific)
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.
Store protective clothing separately.
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

## 9 Physical and chemical properties

- Information on basic physical and chemical properties

General Information
Appearance:
Form:
Fluid

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|  | (Contd. of page 8) |
| :--- | :---: |
| . Other information | No further relevant information available. |

## 10 Stability and reactivity

- Reactivity No further relevant information available.
- 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: Sensitization possible through inhalation.
Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant
- Carcinogenic categories

IARC (International Agency for Research on Cancer)

| $98-56-6$ | 4-chloro-alpha,alpha,alpha-trifluorotoluene | $2 B$ |
| ---: | :--- | :--- |
| $1330-20-7$ | xylene | 3 |
| $100-41-4$ | ethylbenzene | $2 B$ |

NTP (National Toxicology Program)
None of the ingredients is listed.
OSHA-Ca (Occupational Safety \& Health Administration)
None of the ingredients is listed.

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## 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.
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.

## 14 Transport information

| • UN-Number |  |
| :--- | :--- |
| - DOT, ADR, IMDG, IATA | UN1263 |
| • UN proper shipping name |  |
| - DOT | Paint |
| • ADR | 1263 PAINT |
| - IMDG, IATA | PAINT |

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| Excepted quantities (EQ) | Code: E1 <br> Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml |
| :---: | :---: |
| UN "Model Regulation": | UN 1263 PAINT, 3, III |

## 15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
Sara
Section 355 (extremely hazardous substances):
4098-71-9
Section 313 (Specific toxic chemical listings):
112-07-2 2-butoxyethyl acetate
1330-20-7 xylene
100-41-4 ethylbenzene
822-06-0 hexamethylene-di-isocyanate
4098-71-9 3 -isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
TSCA (Toxic Substances Control Act):
All components have the value ACTIVE.

- Hazardous Air Pollutants

1330-20-7 xylene
100-41-4 ethylbenzene
822-06-0 hexamethylene-di-isocyanate
Proposition 65
Chemicals known to cause cancer:
98-56-6 4 4-chloro-alpha, alpha, alpha-trifluorotoluene
100-41-4 ethylbenzene
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.

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Carcinogenic categories

- EPA (Environmental Protection Agency)

| $1330-20-7$ | xylene | $I$ |
| ---: | :--- | :--- |
| $100-41-4$ | ethylbenzene | $D$ |

- TLV (Threshold Limit Value)

| $112-07-2$ | 2 -butoxyethyl acetate | A3 |
| ---: | :--- | :--- |
| $1330-20-7$ | xylene | A4 |
| $100-41-4$ | ethylbenzene | A3 |

- 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 Danger

- Hazard-determining components of labeling:

4-chloro-alpha, alpha, alpha-trifluorotoluene
Homopolymer of hexamethylene diisocyanate
Isophorone Diisocyanate homopolymer
ethylbenzene
Hazard statements
Flammable liquid and vapor.
Causes skin irritation.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Suspected of causing cancer.
May cause respiratory irritation.
Precautionary statements
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
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

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Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
[In case of inadequate ventilation] wear respiratory 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.
IF exposed or concerned: Get medical advice/attention.
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.
If experiencing respiratory symptoms: Call a poison center/doctor.
In case of fire: Use CO2, powder or water spray to extinguish.
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 06/22/2023
- 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 relatif au transport international 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
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

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TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit
Flammable Liquids 3: Flammable liquids - Category 3
Skin Irritation 2: Skin corrosion/irritation - Category 2
Eye Irritation 2A: Serious eye damage/eye irritation - Category 2A
Sensitization - Respiratory 1: Respiratory sensitisation - Category 1
Carcinogenicity 2: Carcinogenicity - Category 2
Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) - Category 3

* Data compared to the previous version altered.

