

SAFETY DATA SHEET

Date of issue/Date of revision

: 29 April 2025

Version

: 14.01



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

1.1 Product identifier

Product name : SIGMAGUARD 730 HARDENER

Product code : 00247816

Other means of identification

Not available.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Product use : Professional applications, Used by spraying.

**Use of the substance/
mixture** : Coating.

Uses advised against : Product is not intended, labelled or packaged for consumer use.

1.3 Details of the supplier of the safety data sheet

PPG Coatings Belgium BV/SRL
Tweemontstraat 104
B-2100 Deurne
Belgium
Telephone +32-33606311
Fax +32-33606435

**e-mail address of person
responsible for this SDS** : Product.Stewardship.EMEA@ppg.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : Poison Information Centre; emergency telephone, public + 45 82 12 12 12 (health sector +45 35 31 55 55)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226
Skin Irrit. 2, H315
Eye Dam. 1, H318
Carc. 2, H351
STOT SE 3, H335
STOT SE 3, H336

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

Code	: 00247816	Date of issue/Date of revision	: 29 April 2025
SIGMAGUARD 730 HARDENER			

SECTION 2: Hazards identification

2.2 Label elements

Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	Flammable liquid and vapour. Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer.
<u>Precautionary statements</u>		
Prevention	:	Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Response	:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Storage	:	Store in a well-ventilated place. Keep container tightly closed.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations. P280, P210, P305 + P351 + P338, P310, P403 + P233, P501
Hazardous ingredients	:	☒ ylene; 1-methoxy-2-propanol; 4-methylpentan-2-one and 2-methylpropan-1-ol
Supplemental label elements	:	Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
<u>Special packaging requirements</u>		
Containers to be fitted with child-resistant fastenings	:	Not applicable.
Tactile warning of danger	:	Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	:	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	:	Prolonged or repeated contact may dry skin and cause irritation.

Code	: 00247816	Date of issue/Date of revision	: 29 April 2025
SIGMAGUARD 730 HARDENER			

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	% by weight	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7	≥10 - ≤21	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Dermal] = 1700 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≥5.0 - ≤10	Flam. Liq. 3, H226 STOT SE 3, H336	-	[1] [2]
4-methylpentan-2-one	REACH #: 01-2119473980-30 EC: 203-550-1 CAS: 108-10-1 Index: 606-004-00-4	≥5.0 - ≤10	Flam. Liq. 2, H225 Acute Tox. 4, H332 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 EUH066	ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
2-methylpropan-1-ol	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1	≥5.0 - ≤10	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	-	[1] [2]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥1.0 - ≤3.7	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Inhalation (vapours)] = 17.8 mg/l	[1] [2]
2-methoxypropanol	EC: 216-455-5 CAS: 1589-47-5 Index: 603-106-00-0	<0.30	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 1B, H360D STOT SE 3, H335 See Section 16 for the full text of the H statements declared above.	-	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Xylene: Several REACH registrations cover the REACH registered substance with xylene isomers, ethylbenzene (and toluene). The other REACH Registrations include: 01-2119555267-33 reaction mass of ethylbenzene and m-xylene and p-xylene, 01-2119486136-34 Aromatic hydrocarbons, C8, 01-2119539452-40 reaction mass of ethylbenzene and xylene.

Type

Code	: 00247816	Date of issue/Date of revision	: 29 April 2025
SIGMAGUARD 730 HARDENER			

SECTION 3: Composition/information on ingredients

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
Occupational exposure limits, if available, are listed in Section 8.
SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
Ingestion	: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact	: Causes serious eye damage.
Inhalation	: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin.
Ingestion	: Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains

Code : 00247816

Date of issue/Date of revision

: 29 April 2025

SIGMAGUARD 730 HARDENER

SECTION 4: First aid measures

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
- Hazardous combustion products** : Decomposition products may include the following materials: carbon oxides

5.3 Advice for firefighters

- Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

- : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Code : 00247816

Date of issue/Date of revision

: 29 April 2025

SIGMAGUARD 730 HARDENER

SECTION 6: Accidental release measures

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.
- 6.4 Reference to other sections** : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

- : Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

Code	: 00247816	Date of issue/Date of revision	: 29 April 2025
SIGMAGUARD 730 HARDENER			

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
 xylene	Working Environment Authority (Denmark, 3/2024) [xylen, alle isomere] Absorbed through skin. TWA 8 hours: 25 ppm. TWA 8 hours: 109 mg/m³. STEL 15 minutes: 442 mg/m³. STEL 15 minutes: 100 ppm.
1-methoxy-2-propanol	Working Environment Authority (Denmark, 3/2024) [1-methoxy-2-propanol] Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 185 mg/m³. STEL 15 minutes: 568 mg/m³. STEL 15 minutes: 150 ppm.
4-methylpentan-2-one	Working Environment Authority (Denmark, 3/2024) Absorbed through skin. TWA 8 hours: 20 ppm. TWA 8 hours: 83 mg/m³. STEL 15 minutes: 208 mg/m³. STEL 15 minutes: 50 ppm.
2-methylpropan-1-ol	Working Environment Authority (Denmark, 3/2024) [butanol, alle isomere] Absorbed through skin. CEIL: 50 ppm. CEIL: 150 mg/m³.
ethylbenzene	Working Environment Authority (Denmark, 3/2024) K. Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 217 mg/m³. STEL 15 minutes: 434 mg/m³. STEL 15 minutes: 100 ppm.
2-methoxypropanol	Working Environment Authority (Denmark, 3/2024) [2-methoxy-1-propanol] TWA 8 hours: 20 ppm. TWA 8 hours: 75 mg/m³. STEL 15 minutes: 150 mg/m³. STEL 15 minutes: 40 ppm.

Recommended monitoring procedures :  Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Code : 00247816

Date of issue/Date of revision

: 29 April 2025

SIGMAGUARD 730 HARDENER

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure	Value
Xylene	DNEL - General population - Long term - Oral	<i>Effects: Systemic</i> 5 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	<i>Effects: Local</i> 65.3 mg/m ³
	DNEL - General population - Long term - Inhalation	<i>Effects: Systemic</i> 65.3 mg/m ³
	DNEL - General population - Long term - Dermal	<i>Effects: Systemic</i> 125 mg/kg bw/day
	DNEL - Workers - Long term - Dermal	<i>Effects: Systemic</i> 212 mg/kg bw/day
	DNEL - Workers - Long term - Inhalation	<i>Effects: Local</i> 221 mg/m ³
	DNEL - Workers - Long term - Inhalation	<i>Effects: Systemic</i> 221 mg/m ³
	DNEL - General population - Short term - Inhalation	<i>Effects: Local</i> 260 mg/m ³
	DNEL - General population - Short term - Inhalation	<i>Effects: Systemic</i> 260 mg/m ³
	DNEL - Workers - Short term - Inhalation	<i>Effects: Local</i> 442 mg/m ³
1-methoxy-2-propanol	DNEL - Workers - Short term - Inhalation	<i>Effects: Systemic</i> 442 mg/m ³
	DNEL - General population - Long term - Oral	<i>Effects: Systemic</i> 33 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	<i>Effects: Systemic</i> 43.9 mg/m ³
	DNEL - General population - Long term - Dermal	<i>Effects: Systemic</i> 78 mg/kg bw/day
4-methylpentan-2-one	DNEL - Workers - Long term - Dermal	<i>Effects: Systemic</i> 183 mg/kg bw/day
	DNEL - Workers - Long term - Inhalation	<i>Effects: Systemic</i> 369 mg/m ³
	DNEL - Workers - Short term - Inhalation	<i>Effects: Local</i> 553.5 mg/m ³
	DNEL - Workers - Short term - Inhalation	<i>Effects: Systemic</i> 553.5 mg/m ³
	DNEL - General population - Long term - Dermal	<i>Effects: Systemic</i> 4.2 mg/kg bw/day
	DNEL - Workers - Long term - Dermal	<i>Effects: Systemic</i> 11.8 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	<i>Effects: Local</i> 14.7 mg/m ³
	DNEL - General population - Long term - Inhalation	<i>Effects: Systemic</i> 14.7 mg/m ³
	DNEL - Workers - Long term - Inhalation	<i>Effects: Local</i> 83 mg/m ³
	DNEL - Workers - Long term - Inhalation	<i>Effects: Systemic</i> 83 mg/m ³
2-methylpropan-1-ol	DNEL - General population - Short term - Inhalation	<i>Effects: Local</i> 155.2 mg/m ³
	DNEL - General population - Short term - Inhalation	<i>Effects: Systemic</i> 155.2 mg/m ³
	DNEL - Workers - Short term - Inhalation	<i>Effects: Local</i> 208 mg/m ³
	DNEL - Workers - Short term - Inhalation	<i>Effects: Systemic</i> 208 mg/m ³
ethylbenzene	DNEL - General population - Long term - Oral	<i>Effects: Systemic</i> 4.2 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	<i>Effects: Local</i> 55 mg/m ³
	DNEL - Workers - Long term - Inhalation	<i>Effects: Local</i> 310 mg/m ³
	DMEL - Workers - Long term - Inhalation	<i>Effects: Local</i> 442 mg/m ³
	DMEL - Workers - Short term - Inhalation	<i>Effects: Systemic</i> 884 mg/m ³
	DNEL - General population - Long term - Oral	<i>Effects: Systemic</i> 1.6 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	<i>Effects: Systemic</i> 15 mg/m ³
	DNEL - Workers - Long term - Inhalation	<i>Effects: Systemic</i> 77 mg/m ³
	DNEL - Workers - Long term - Dermal	<i>Effects: Systemic</i> 180 mg/kg bw/day
	DNEL - Workers - Short term - Inhalation	<i>Effects: Local</i> 293 mg/m ³

PNECs

Code : 00247816

Date of issue/Date of revision

: 29 April 2025

SIGMAGUARD 730 HARDENER

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Compartment Detail - Method	Value
Xylene	Fresh water	0.327 mg/l
	Marine water	0.327 mg/l
	Sewage Treatment Plant	6.58 mg/l
	Fresh water sediment	12.46 mg/kg dwt
	Marine water sediment	12.46 mg/kg dwt
	Soil	2.31 mg/kg
1-methoxy-2-propanol	Fresh water - Assessment Factors	10 mg/l
	Marine water - Assessment Factors	1 mg/l
	Sewage Treatment Plant - Assessment Factors	100 mg/l
	Fresh water sediment - Equilibrium Partitioning	41.6 mg/kg
	Marine water sediment - Equilibrium Partitioning	4.17 mg/kg
	Soil - Equilibrium Partitioning	2.47 mg/kg
4-methylpentan-2-one	Fresh water - Assessment Factors	0.6 mg/l
	Marine water - Assessment Factors	0.06 mg/l
	Sewage Treatment Plant - Assessment Factors	27.5 mg/l
	Fresh water sediment - Equilibrium Partitioning	8.27 mg/kg
	Marine water sediment - Equilibrium Partitioning	0.83 mg/kg
	Soil - Equilibrium Partitioning	1.3 mg/kg
2-methylpropan-1-ol	Fresh water - Assessment Factors	0.4 mg/l
	Marine water - Assessment Factors	0.04 mg/l
	Sewage Treatment Plant - Assessment Factors	10 mg/l
	Fresh water sediment - Equilibrium Partitioning	1.56 mg/kg dwt
	Marine water sediment	0.156 mg/kg dwt
	Soil - Equilibrium Partitioning	0.076 mg/kg dwt
ethylbenzene	Fresh water - Assessment Factors	0.1 mg/l
	Marine water - Assessment Factors	0.01 mg/l
	Sewage Treatment Plant - Assessment Factors	9.6 mg/l
	Fresh water sediment - Equilibrium Partitioning	13.7 mg/kg dwt
	Marine water sediment - Equilibrium Partitioning	1.37 mg/kg dwt
	Soil - Equilibrium Partitioning	2.68 mg/kg dwt
	Secondary Poisoning	20 mg/kg

8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Chemical splash goggles and face shield. Use eye protection according to EN 166.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or

Code	: 00247816	Date of issue/Date of revision	: 29 April 2025
SIGMAGUARD 730 HARDENER			

SECTION 8: Exposure controls/personal protection

frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Gloves	: For prolonged or repeated handling, use the following type of gloves: May be used: nitrile rubber Recommended: polyvinyl alcohol (PVA), butyl rubber, Viton®
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapour (Type A) and particulate filter P3
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance	
Physical state	: Liquid.
Colour	: Colourless.
Odour	: Amine-like.
Melting point/freezing point	: Not determined.
Boiling point or initial boiling point and boiling range	: >37.78°C
Flammability	: Not determined. There are no data available on the mixture itself.
Lower and upper explosion limit	: Not available.
Flash point	: Closed cup: 26°C
Auto-ignition temperature	: 290°C (554°F)
Decomposition temperature	: Stable under recommended storage and handling conditions (see Section 7).
pH	: Not applicable. insoluble in water.

Code	: 00247816	Date of issue/Date of revision	: 29 April 2025
SIGMAGUARD 730 HARDENER			

SECTION 9: Physical and chemical properties

Viscosity

Dynamic (room temperature): Not available.

Kinematic (room temperature): Not available.

Kinematic (40°C): >21 mm²/s

Viscosity

60 - 100 s (ISO 6mm)

Solubility

Media	Result
cold water	Not soluble

Partition coefficient n-octanol/ water (log Pow)

Not applicable.

Vapour pressure

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
 methylpentan-2-one	15.75128	2.1				

Relative density

0.98

Particle characteristics

Median particle size

Not applicable.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties

The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.

Oxidising properties

Product does not present an oxidizing hazard.

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.				
10.2 Chemical stability	:	The product is stable.				
10.3 Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.				
10.4 Conditions to avoid	:	When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.				
10.5 Incompatible materials	:	Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.				
10.6 Hazardous decomposition products	:	Depending on conditions, decomposition products may include the following materials: carbon oxides				

Code	: 00247816	Date of issue/Date of revision	: 29 April 2025
SIGMAGUARD 730 HARDENER			

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly.

- Causes serious eye damage.
- Causes skin irritation.
- Suspected of causing cancer.
- May cause respiratory irritation.
- May cause drowsiness or dizziness.

Acute toxicity

Product/ingredient name	Result	Dose / Exposure
Xylene	Rat - Oral - LD50	4.3 g/kg
	Rabbit - Dermal - LD50	1.7 g/kg
1-methoxy-2-propanol	Rabbit - Dermal - LD50	13 g/kg
	Rat - Oral - LD50	5.2 g/kg
4-methylpentan-2-one	Rat - Inhalation - LC50 Vapour	>7000 ppm [6 hours]
	Rat - Oral - LD50	2.08 g/kg
	Rabbit - Dermal - LD50	>5000 mg/kg
2-methylpropan-1-ol	Rat - Inhalation - LC50 Vapour	11 mg/l [4 hours]
	Rat - Oral - LD50	2830 mg/kg
	Rabbit - Dermal - LD50	2460 mg/kg
ethylbenzene	Rat - Inhalation - LC50 Vapour	24.6 mg/l [4 hours]
	Rat - Oral - LD50	3.5 g/kg
	Rabbit - Dermal - LD50	17.8 g/kg
2-methoxypropanol	Rat - Inhalation - LC50 Vapour	17.8 mg/l [4 hours]
	Rat - Oral - LD50	5.3 g/kg
	Rabbit - Dermal - LD50	5660 mg/kg
	Rat - Inhalation - LC50 Vapour	15000 ppm [4 hours]

Acute toxicity estimates

Route	ATE value
Dermal	14020.85 mg/kg
Inhalation (vapours)	49.04 mg/l

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

Product/ingredient name	Result
Xylene	Rabbit - Skin - Moderate irritant Amount/concentration applied: 500 mg Duration of treatment/exposure: 24 hours

Conclusion/Summary

- Skin : Causes skin irritation.
- Eyes : Causes serious eye damage.
- Respiratory : Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Conclusion/Summary

- Skin : Based on available data, the classification criteria are not met.
- Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Suspected of causing cancer.

Code	: 00247816	Date of issue/Date of revision	: 29 April 2025
SIGMAGUARD 730 HARDENER			

SECTION 11: Toxicological information

Reproductive toxicity
Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
1-methoxy-2-propanol	Category 3	-	Narcotic effects
4-methylpentan-2-one	Category 3	-	Narcotic effects
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
-	Category 3	-	Narcotic effects
2-methoxypropanol	Category 3	-	Respiratory tract irritation

Conclusion/Summary :
May cause respiratory irritation.
May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs

Conclusion/Summary :
Based on available data, the classification criteria are not met.

Aspiration hazard

Product/ingredient name	Result
xylene	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1

Conclusion/Summary :
Based on available data, the classification criteria are not met.

Information on likely routes of exposure : Not available.

Potential acute health effects

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

Ingestion : Can cause central nervous system (CNS) depression.

Skin contact : Causes skin irritation. Defatting to the skin.

Eye contact : Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Ingestion : Adverse symptoms may include the following:
stomach pains

Code	: 00247816	Date of issue/Date of revision	: 29 April 2025
SIGMAGUARD 730 HARDENER			

SECTION 11: Toxicological information

- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
dryness
cracking
blistering may occur
- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Long term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Potential chronic health effects

- General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.
- Other information** : Prolonged or repeated contact may dry skin and cause irritation. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

 The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

 There are no data available on the mixture itself.
Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as hazardous to the environment, but contains substance(s) hazardous to the environment. See section 3 for details.

12.1 Toxicity

Code	: 00247816	Date of issue/Date of revision	: 29 April 2025
SIGMAGUARD 730 HARDENER			

SECTION 12: Ecological information

Product/ingredient name	Result	Species	Dose / Exposure
☒ 1-methoxy-2-propanol	Acute - LC50 - Fresh water	Fish - Goldfish	>4500 mg/l [96 hours]
4-methylpentan-2-one	Acute - LC50	Daphnia - Daphnia	23300 mg/l [48 hours]
2-methylpropan-1-ol	Acute - LC50	Fish	>179 mg/l [96 hours]
ethylbenzene	Acute - EC50	Daphnia	1100 mg/l [48 hours]
	Acute - EC50 - Fresh water	Daphnia	1.8 mg/l [48 hours]
	Chronic - NOEC - Fresh water	Daphnia - <i>Ceriodaphnia dubia</i>	1 mg/l

Conclusion/Summary : ☒ Based on available data, the classification criteria are not met.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose / Inoculum
☒ 4-methylpentan-2-one	OECD 301F	83% [28 days] - Readily	
ethylbenzene	-	79% [10 days] - Readily	

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
☒ Xylene	-	-	Readily
4-methylpentan-2-one	-	-	Readily
ethylbenzene	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
☒ Xylene	3.12	7.4 to 18.5	Low
1-methoxy-2-propanol	<1	-	Low
4-methylpentan-2-one	1.9	-	Low
2-methylpropan-1-ol	1	-	Low
ethylbenzene	3.6	79.43	Low
2-methoxypropanol	-0.49	-	Low

12.4 Mobility in soil

Soil/water partition coefficient

Product/ingredient name	logK _{oc}	K _{oc}
☒ 1-methoxy-2-propanol	1.02	10.447
4-methylpentan-2-one	1.61	40.9047
2-methylpropan-1-ol	1.08	12.0246
ethylbenzene	2.23	170.406
2-methoxypropanol	1.02	10.522

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

☒ The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

Code	: 00247816	Date of issue/Date of revision	: 29 April 2025
SIGMAGUARD 730 HARDENER			

SECTION 12: Ecological information

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste

:

European waste catalogue (EWC)

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

Packaging

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)
Container	15 01 06 mixed packaging

Special precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	No.	No.	No.	No.

Code	: 00247816	Date of issue/Date of revision	: 29 April 2025
SIGMAGUARD 730 HARDENER			

SECTION 14: Transport information

Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.
-----------------------------	-----------------	-----------------	-----------------	-----------------

Additional information

ADR/RID : None identified.
Tunnel code : (D/E)
ADN : None identified.
IMDG : None identified.
IATA : None identified.

14.6 Special precautions for user : **Transport within user’s premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments : Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
[EU Regulation \(EC\) No. 1907/2006 \(REACH\)](#)

[Annex XIV - List of substances subject to authorisation](#)

[Annex XIV](#)
None of the components are listed.
[Substances of very high concern](#)
None of the components are listed.

[Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles](#)

Product/ingredient name	Entry Number (REACH)
 SIGMAGUARD 730 HARDENER	3

Labelling : Not applicable.
Explosive precursors :  Not applicable.
[Ozone depleting substances \(EU 2024/590\)](#)
Not listed.

[Seveso Directive](#)
This product is controlled under the Seveso Directive.
[Danger criteria](#)

Category
 5c

[National regulations](#)
Fire class : -1
[Executive Order No. 1795/2015](#)

Code	: 00247816	Date of issue/Date of revision	: 29 April 2025
SIGMAGUARD 730 HARDENER			

SECTION 15: Regulatory information

Ingredient name	Annex I Section A	Annex I Section B
ethylbenzene 4-methylpentan-2-one	Listed -	- Carc. 2, H351

MAL-code : 4-3

Protection based on MAL : According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:

General: Gloves must be worn for all work that may result in soiling. Apron/coveralls/ protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

In all spraying operations in which there is return spray, the following must be worn: respiratory protection and arm protectors/apron/coveralls/protective clothing as appropriate or as instructed.

MAL-code: 4-3
Application: When spraying in new* booths if the operator is outside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin.

- Air-supplied half mask and eye protection must be worn.

When using scraper or knife, brush, roller, etc. for pre- and post-treatments in cabins or booths of the existing* facility type, if the operator is inside the spray zone.

- Air-supplied half mask, coveralls and eye protection must be worn.

During downtimes, cleaning and repair in closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents.

- Air-supplied full mask and coveralls must be worn.

When spraying in existing* spray booths, if the operator is outside the spray zone.

- Air-supplied full mask, arm protectors and apron must be worn.

During non-atomising spraying in existing* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone.

- Air-supplied full mask must be worn.

During all spraying where atomisation occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.

- Air-supplied full mask, coveralls and hood must be worn.

Code : 00247816

Date of issue/Date of revision

: 29 April 2025

SIGMAGUARD 730 HARDENER

SECTION 15: Regulatory information

Drying: Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc, must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.

Polishing: When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.

Caution The regulations contain other stipulations in addition to the above.

*See Regulations.

- Restrictions on use** : Not to be used by professional users below 18 years of age. See the National Working Environment Authorities Executive Order regarding Young People At Work.
- List of undesirable substances** : Not listed
- Carcinogenic waste** : Waste containers must be labeled: Contains a substance or substances regulated by Danish working environment legislation on cancer risks.

15.2 Chemical safety assessment : No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

PBT = Persistent, Bioaccumulative and Toxic

vPvB = Very Persistent and Very Bioaccumulative

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

IMDG = International Maritime Dangerous Goods

IATA = International Air Transport Association

[Procedure used to derive the classification according to Regulation \(EC\) No. 1272/2008 \[CLP/GHS\]](#)

Code	: 00247816	Date of issue/Date of revision	: 29 April 2025
SIGMAGUARD 730 HARDENER			

SECTION 16: Other information

Classification	Justification
Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 Carc. 2, H351 STOT SE 3, H335 STOT SE 3, H336	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method

Full text of abbreviated H statements

H225 H226 H304 H312 H315 H318 H319 H332 H335 H336 H351 H360D H373 H412 EUH066	Highly flammable liquid and vapour. Flammable liquid and vapour. May be fatal if swallowed and enters airways. Harmful in contact with skin. Causes skin irritation. Causes serious eye damage. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer. May damage the unborn child. May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects. Repeated exposure may cause skin dryness or cracking.
---	---

Full text of classifications [CLP/GHS]

Acute Tox. 4 Aquatic Chronic 3 Asp. Tox. 1 Carc. 2 Eye Dam. 1 Eye Irrit. 2 Flam. Liq. 2 Flam. Liq. 3 Repr. 1B Skin Irrit. 2 STOT RE 2 STOT SE 3	ACUTE TOXICITY - Category 4 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 ASPIRATION HAZARD - Category 1 CARCINOGENICITY - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3 REPRODUCTIVE TOXICITY - Category 1B SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
--	---

History

Date of issue/ Date of revision	: 29 April 2025
Date of previous issue	: 21 October 2022
Prepared by	: EHS
Version	: 14.01

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.