SAFETY DATA SHEET

Date of issue/Date of revision : 20 April 2025 Version : 1.05



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

1.1 Product identifier

Product name : SIGMACOVER 246/410/430/620 HARDENER

Product code : 000001188506

Other means of identification

00444781

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

: Hardener.

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

National Poison Information Centre at Beaumont Hospital. Tel: +353 1 8092566, email: npicdublin@beaumont.ie Supplier

+31 20 4075210

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 Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 2, H361fd STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

English (GB) Ireland 1/21

Code : 000001188506 Date of issue/Date of revision : 20 April 2025

SIGMACOVER 246/410/430/620 HARDENER

SECTION 2: Hazards identification

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.

2.2 Label elements

Hazard pictograms











Signal word

Danger

Hazard statements

: Flammable liquid and vapour.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction. May cause respiratory irritation.

Suspected of damaging fertility. Suspected of damaging the unborn child.

Very toxic to aquatic life with long lasting effects.

Precautionary statements

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. Avoid release to the environment.

Response

: Collect spillage.

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, P273, P391, P403 + P233, P501

Hazardous ingredients

: Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids

and triethylenetetramine; xylene; 4-nonylphenol, branched and

3,6-diazaoctanethylenediamin

Supplemental label elements

: Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and

: Not applicable.

articles

Special packaging requirements

Containers to be fitted with child-resistant

: Not applicable.

fastenings

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.

Ireland 2/21 English (GB)

SIGMACOVER 246/410/430/620 HARDENER

SECTION 2: Hazards identification

Other hazards which do not result in classification

: Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

May cause endocrine disruption.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

English (GB)

Product/ingredient name	Identifiers	% by weight	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	REACH #: 01-2119972320-44 EC: 500-191-5 CAS: 68082-29-1	≥25 - ≤50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 2, H411	-	[1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7	≥10 - ≤25	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]
4-nonylphenol, branched	REACH #: 01-2119510715-45 EC: 284-325-5 CAS: 84852-15-3 Index: 601-053-00-8	≥10 - ≤25	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Repr. 2, H361fd Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 1300 mg/ kg M [Acute] = 10 M [Chronic] = 10	[1] [3]
2-methylpropan-1-ol	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1	≥10 - <20	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	-	[1] [2]
2,4,6-tris (dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2	≥5.0 - ≤10	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1C, H314 Eye Dam. 1, H318	ATE [Oral] = 1200 mg/ kg ATE [Dermal] = 1280 mg/kg	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥1.0 - ≤5.0	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]
3,6-diazaoctanethylenediamin	EC: 203-950-6 CAS: 112-24-3 Index: 612-059-00-5	≥1.0 - ≤5.0	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	ATE [Oral] = 1716 mg/ kg ATE [Dermal] = 1465 mg/kg	[1]

Ireland

3/21

	001188506 /410/430/620 HARDENER	Date	of issue/Date of revision	: 20 April 2025	
SECTION 3: 0	Composition/informa	tion on	ingredients		
toluene	EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≤0.30	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 3, H412 See Section 16 for the full text of the H statements declared above.	-	[1]

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.

Inhalation

- Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit

[3] Substance of equivalent concern - Endocrine disrupting properties

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.

: 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.

: No action shall be taken involving any personal risk or without suitable training. If it is **Protection of first-aiders**

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 : May cause respiratory irritation.

Skin contact : Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.

: Corrosive to the digestive tract. Causes burns. Ingestion

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

> pain watering redness

English (GB) Ireland 4/21

SIGMACOVER 246/410/430/620 HARDENER

SECTION 4: First aid measures

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

reduced foetal weight increase in foetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations

Ingestion: Adverse symptoms may include the following:

stomach pains reduced foetal weight increase in foetal deaths skeletal malformations

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

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. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products

: Decomposition products may include the following materials: carbon oxides

nitrogen 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.

English (GB) Ireland 5/21

Code : 000001188506 Date of issue/Date of revision : 20 April 2025

SIGMACOVER 246/410/430/620 HARDENER

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 nonemergency 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and material for containment and cleaning up

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 noncombustible, 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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. 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. Avoid release to the environment. 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.

Ireland 6/21 English (GB)

SIGMACOVER 246/410/430/620 HARDENER

SECTION 7: Handling and storage

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.

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	NAOSH (Ireland, 4/2024) [xylene] Absorbed through skin.		
	OELV 8 hours: 50 ppm.		
	OELV 8 hours: 221 mg/m ³ .		
	OELV 15 minutes: 100 ppm.		
	OELV 15 minutes: 442 mg/m³.		
2-methylpropan-1-ol	NAOSH (Ireland, 4/2024)		
	OELV 8 hours: 150 ppm.		
	OELV 8 hours: 700 mg/m ³ .		
ethylbenzene	NAOSH (Ireland, 4/2024) Absorbed through skin.		
	OELV 8 hours: 100 ppm.		
	OELV 8 hours: 442 mg/m ³ .		
	OELV 15 minutes: 200 ppm.		
	OELV 15 minutes: 884 mg/m³.		

Biological exposure indices

English (GB)

Product/ingredient name	Exposure indices				
kylene	NAOSH (Ireland, 1/2011) [Xylene] BMGV: 1.5 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases.				
ethylbenzene	NAOSH (Ireland, 1/2011) BMGV: Semi-quantitative, the biological analyte is an indicator of exposure to the substance but the quantitative interpretation of the measurement is ambiguous. These analytes should be used as a screening test if a quantitative test is not practical; or as a confirmatory test if the quantitative test is not specific and the origin				

Ireland

7/21

SIGMACOVER 246/410/430/620 HARDENER

SECTION 8: Exposure controls/personal protection

of the determinant is in question., ethylbenzene [in endexhaled air]. Sampling time: not critical.

BMGV: 0.7 g/g creatinine [Semi-quantitative, the biological analyte is an indicator of exposure to the substance but the quantitative interpretation of the measurement is ambiguous. These analytes should be used as a screening test if a quantitative test is not practical; or as a confirmatory test if the quantitative test is not specific and the origin of the determinant is in question.], mandelic acid and phenylglyoxylic acid [in urine]. Sampling time: end of shift at end of workweek.

toluene

NAOSH (Ireland, 1/2011)

BMGV: 0.3 mg/g creatinine, o-cresol [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases.

BMGV: 0.03 mg/l, toluene [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases.

BMGV: 0.02 mg/l, toluene [in blood]. Sampling time: prior to last shift of workweek.

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

Product/ingredient name	Exposure		Value
Tatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	DNEL - General population - Long term - Oral	Effects: Systemic	97.2 μg/kg bw/day
	DNEL - General population - Long term - Dermal	Effects: Systemic	97.2 μg/kg bw/day
	DNEL - General population - Long term - Inhalation	Effects: Systemic	0.169 mg/m³
	DNEL - Workers - Long term - Dermal	Effects: Systemic	0.272 mg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Effects: Systemic	0.952 mg/m ³
xylene	DNEL - General population - Long term - Oral	Effects: Systemic	5 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	Effects: Local	65.3 mg/m³
	DNEL - General population - Long term - Inhalation	Effects: Systemic	65.3 mg/m³
	DNEL - General population - Long term - Dermal	Effects: Systemic	125 mg/kg bw/day
	DNEL - Workers - Long term - Dermal	Effects: Systemic	212 mg/kg bw/day
	DNEL - Workers - Long term - Inhalation	Effects: Local	221 mg/m³
	DNEL - Workers - Long term - Inhalation	Effects: Systemic	221 mg/m³
	DNEL - General population - Short term - Inhalation	Effects: Local	260 mg/m³
	DNEL - General population - Short term - Inhalation	Effects: Systemic	260 mg/m ³

English (GB) Ireland 8/21

SIGMACOVER 246/410/430/620 HARDENER

SECTION 8: Exposure controls/personal protection

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		DNEL - Workers - Short term - Inhalation	Effects: Local	442 mg/m³
		DNEL - Workers - Short term - Inhalation	Effects: Systemic	442 mg/m³
	4-nonylphenol,	DNEL - General population - Short term - Oral	Effects: Systemic	0.4 mg/kg bw/day
	branched			
		DNEL - General population - Short term -	Effects: Systemic	0.8 mg/m³
		Inhalation		
		DNEL - General population - Short term - Dermal	Effects: Systemic	7.6 mg/kg bw/day
		DNEL - General population - Long term - Oral	Effects: Systemic	0.08 mg/kg bw/day
		DNEL - General population - Long term -	Effects: Systemic	0.4 mg/m³
		Inhalation		
		DNEL - Workers - Long term - Inhalation	Effects: Systemic	0.5 mg/m³
		DNEL - Workers - Short term - Inhalation	Effects: Systemic	1 mg/m³
		DNEL - General population - Long term - Dermal	Effects: Systemic	3.8 mg/kg bw/day
		DNEL - Workers - Long term - Dermal	Effects: Systemic	7.5 mg/kg bw/day
		DNEL - Workers - Short term - Dermal	Effects: Systemic	15 mg/kg bw/day
	2-methylpropan-1-ol	DNEL - General population - Long term -	Effects: Local	55 mg/m ³
	,.,.,	Inhalation		
		DNEL - Workers - Long term - Inhalation	Effects: Local	310 mg/m³
	2,4,6-tris	DNEL - General population - Long term - Oral	Effects: Systemic	0.075 mg/kg bw/day
	(dimethylaminomethyl)	21122 Seneral population 2011g term Star		e.e.e.eg.n.g zuraay
	phenol			
	priorior	DNEL - General population - Short term - Dermal	Effects: Systemic	0.075 mg/kg bw/day
		DNEL - General population - Long term - Dermal	Effects: Systemic	0.075 mg/kg bw/day
		DNEL - General population - Short term -	Effects: Systemic	0.13 mg/m ³
		Inhalation	Lifects. Systemic	0.13 1119/111
		DNEL - General population - Long term -	Effects: Systemic	0.13 mg/m³
		Inhalation	Lifects. Systemic	0.13 1119/111
		DNEL - Workers - Long term - Dermal	Effects: Systemic	0.15 mg/kg bw/day
		DNEL - Workers - Long term - Inhalation	Effects: Systemic	0.53 mg/m ³
		DNEL - Workers - Short term - Dermal	Effects: Systemic	0.6 mg/kg bw/day
		DNEL - Workers - Short term - Definal DNEL - Workers - Short term - Inhalation	Effects: Systemic	2.1 mg/m ³
	othylbonzono		Effects: Local	442 mg/m ³
	ethylbenzene	DMEL - Workers - Long term - Inhalation DMEL - Workers - Short term - Inhalation		
			Effects: Systemic	884 mg/m³
		DNEL - General population - Long term - Oral	Effects: Systemic	1.6 mg/kg bw/day
		DNEL - General population - Long term -	Effects: Systemic	15 mg/m³
		Inhalation	Effects Overtowell	77 / 3
		DNEL - Workers - Long term - Inhalation	Effects: Systemic	77 mg/m³
		DNEL - Workers - Long term - Dermal	Effects: Systemic	180 mg/kg bw/day
	0.0 diamage than 11 diamage	DNEL - Workers - Short term - Inhalation	Effects: Local	293 mg/m³
	3,6-diazaoctanethylenediamin	DNEL - Workers - Long term - Dermal	Effects: Local	28 μg/cm²
		DNEL - General population - Long term - Dermal	Effects: Systemic	0.25 mg/kg bw/day
		DNEL - General population - Long term -	Effects: Systemic	0.29 mg/m³
		Inhalation		
		DNEL - General population - Long term - Oral	Effects: Systemic	0.41 mg/kg bw/day
		DNEL - General population - Long term - Dermal	Effects: Local	0.43 mg/cm ²
		DNEL - Workers - Long term - Dermal	Effects: Systemic	0.57 mg/kg bw/day
		DNEL - General population - Short term - Dermal	Effects: Local	1 mg/cm ²
		DNEL - Workers - Long term - Inhalation	Effects: Systemic	1 mg/m³
		DNEL - General population - Short term - Dermal	Effects: Systemic	8 mg/kg bw/day
		DNEL - General population - Short term - Oral	Effects: Systemic	20 mg/kg bw/day
		DNEL - General population - Short term -	Effects: Systemic	1600 mg/m³
		Inhalation	•	
		DNEL - Workers - Short term - Inhalation	Effects: Systemic	5380 mg/m³
	toluene	DNEL - General population - Long term - Oral	Effects: Systemic	8.13 mg/kg bw/day
		DNEL - General population - Long term -	Effects: Local	56.5 mg/m ³
		Inhalation		
		DNEL - General population - Long term -	Effects: Systemic	56.5 mg/m³
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English (GB) Ireland 9/21

SIGMACOVER 246/410/430/620 HARDENER

SECTION 8: Exposure controls/personal protection

Inhalation		
DNEL - Workers - Long term - Inhalation	Effects: Local	192 mg/m³
DNEL - Workers - Long term - Inhalation	Effects: Systemic	192 mg/m³
DNEL - General population - Long term - Dermal	Effects: Systemic	226 mg/kg bw/day
DNEL - General population - Short term -	Effects: Local	226 mg/m³
Inhalation		
DNEL - General population - Short term -	Effects: Systemic	226 mg/m³
Inhalation	•	
DNEL - Workers - Long term - Dermal	Effects: Systemic	384 mg/kg bw/day
DNEL - Workers - Short term - Inhalation	Effects: Local	384 mg/m³
DNEL - Workers - Short term - Inhalation	Effects: Systemic	384 mg/m³

PNECs

Product/ingredient name	Compartment Detail - Method	Value	
Tatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Fresh water - Assessment Factors	0.043 mg/l	
	Marine water - Assessment Factors	0 mg/l	
	Sewage Treatment Plant - Assessment Factors	3.84 mg/l	
	Fresh water sediment - Equilibrium Partitioning	434.02 mg/kg dwt	
	Marine water sediment - Equilibrium Partitioning	43.4 mg/kg dwt	
	Soil - Equilibrium Partitioning	86.78 mg/kg dwt	
kylene	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	
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	
toluene	Fresh water - Sensitivity Distribution	0.68 mg/l	
	Marine water - Sensitivity Distribution	0.68 mg/l	
	Sewage Treatment Plant - Sensitivity Distribution	13.61 mg/l	
	Fresh water sediment - Equilibrium Partitioning	16.39 mg/kg dwt	
	Marine water sediment	16.39 mg/kg dwt	

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

English (GB)	Ireland	10/21
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SIGMACOVER 246/410/430/620 HARDENER

SECTION 8: Exposure controls/personal protection

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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Skin protection

Hand protection

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

: 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 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

: butyl rubber

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 antistatic 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 : Various

Odour : Amine-like.

Melting point/freezing point : Not determined.

English (GB) Ireland 11/21

SIGMACOVER 246/410/430/620 HARDENER

SECTION 9: Physical and chemical properties

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: 27°C

Auto-ignition temperature

Ingredient name	°C	°F	Method
3,6-diazaoctanethylenediamin	337.78	640	

Decomposition temperature

re

: Stable under recommended storage and handling conditions (see Section 7).

Н

: Not applicable. insoluble in water.

Viscosity

: Dynamic (room temperature): Not available. Kinematic (room temperature): Not available.

Kinematic (40°C): >21 mm²/s

Viscosity : 30 - <40 s (ISO 6mm)

Solubility

Media	Result
cold water	Not soluble

Partition coefficient n-octanol/

water (log Pow)

: Not applicable.

Vapour pressure

	Vapou	ır Pressu	re at 20°C	Vapour pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
2-methylpropan-1-ol	<12.00102	<1.6	DIN EN 13016-2			

Relative density : 0.91

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.

English (GB) Ireland 12/21

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878

SECTION 10: Stability and reactivity

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 nitrogen oxides

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 severe skin burns and eye damage.

May cause an allergic skin reaction.

Suspected of damaging fertility. Suspected of damaging the unborn child.

May cause respiratory irritation.

Acute toxicity

Product/ingredient name	Result	Dose / Exposure
Tatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Rat - Dermal - LD50	>2000 mg/kg
	Rat - Oral - LD50	>2000 mg/kg
xylene	Rat - Oral - LD50	4.3 g/kg
	Rabbit - Dermal - LD50	1.7 g/kg
4-nonylphenol, branched	Rabbit - Dermal - LD50	2.14 g/kg
	Rat - Oral - LD50	1300 mg/kg
	<u>Toxic effects</u> : Liver - Other changes Blood -	
	Hemorrhage Gross Metabolite Changes -	
	Weight loss or decreased weight gain	
2-methylpropan-1-ol	Rat - Oral - LD50	2830 mg/kg
	Rabbit - Dermal - LD50	2460 mg/kg
	Rat - Inhalation - LC50 Vapour	24.6 mg/l [4 hours]
2,4,6-tris(dimethylaminomethyl) phenol	Rat - Dermal - LD50	1280 mg/kg
prierioi	Rat - Oral - LD50	1200 mg/kg
	Toxic effects: Peripheral Nerve and Sensation -	1200 Hig/kg
	Flaccid paralysis without anesthesia (usually	
	neuromuscular blockage) Lung, Thorax, or	
	Respiration - Dyspnea	
athydhanzana	Rat - Oral - LD50	2 F a/ka
ethylbenzene		3.5 g/kg
	Rabbit - Dermal - LD50	17.8 g/kg
2.6. diazaastanathulanadiamin	Rat - Inhalation - LC50 Vapour	17.8 mg/l [4 hours]
3,6-diazaoctanethylenediamin	Rabbit - Dermal - LD50	1465 mg/kg
toluene	Rat - Oral - LD50 Rat - Oral - LD50	1716 mg/kg
loiderie		5580 mg/kg
	Rat - Inhalation - LC50 Vapour	49 g/m³ [4 hours]

Acute toxicity estimates

Route	ATE value
Oral	4522.9 mg/kg
Dermal	4937.92 mg/kg
Inhalation (vapours)	42.43 mg/l

Conclusion/Summary Irritation/Corrosion

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

English (GB) Ireland 13/21

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SIGMACOVER 246/410/430/620 HARDENER

SECTION 11: Toxicological information

Product/ingredient name	Result
Tatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Human - Skin - Irritant
-	Rabbit - Eyes - Severe irritant
xylene	Rabbit - Skin - Moderate irritant Amount/concentration applied: 500 mg Duration of treatment/exposure: 24 hours
4-nonylphenol, branched	Rabbit - Skin - Erythema/Eschar Irritation score: 4

Conclusion/Summary

Skin : Causes severe burns.

Eyes : Causes serious eye damage.

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

Respiratory or skin sensitization

Product/ingredient name	Test	Result
Tatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Mouse - skin	Result: Sensitising
3,6-diazaoctanethylenediamin	Guinea pig - skin OECD 406	Result: Sensitising

Conclusion/Summary

Skin : May cause an allergic skin reaction.

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

Mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

Suspected of damaging fertility. Suspected of damaging the unborn child.

Specific target organ toxicity (single exposure)

Product/ingredient name		Route of exposure	Target organs
2-methylpropan-1-ol	Category 3 Category 3 Category 3	-	Respiratory tract irritation Respiratory tract irritation Narcotic effects
	Category 3		Narcotic effects

Conclusion/Summary

May cause respiratory irritation.

Specific target organ toxicity (repeated exposure)

English (GB)	Ireland	14/21

SIGMACOVER 246/410/430/620 HARDENER

SECTION 11: Toxicological information

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

Conclusion/Summary

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

Aspiration hazard

Product/ingredient name	Result
kylene ethylbenzene toluene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Conclusion/Summary

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

Information on likely

: Not available.

routes of exposure

Potential acute health effects

Inhalation : May cause respiratory irritation.

Ingestion : Corrosive to the digestive tract. Causes burns.

Skin contact: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.

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

reduced foetal weight increase in foetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

stomach pains

reduced foetal weight increase in foetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations

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

: No known significant effects or critical hazards.

effects

English (GB) Ireland 15/21

SIGMACOVER 246/410/430/620 HARDENER

SECTION 11: Toxicological information

Potential delayed effects: No known significant effects or critical hazards.

Long term exposure

Potential immediate

ate

: No known significant effects or critical hazards.

effects

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. Once sensitized, a severe allergic reaction may occur when subsequently

exposed to very low levels.

Carcinogenicity

Other information

Mutagenicity

No known significant effects or critical hazards.No known significant effects or critical hazards.

Reproductive toxicity

: Suspected of damaging fertility. Suspected of damaging the unborn child.

: Causes digestive tract burns. 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. Exposure to amine vapor has been reported to cause transient corneal edema described as blue haze, halo effect, foggy or blurred vision for several hours. This condition is typically temporary and does not cause permanent visual effects. When the proper eye protection specified in Section 8 is worn, exposure

is significantly reduced and the condition has not been observed.

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 classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

12.1 Toxicity

Product/ingredient name	Result	Species	Dose / Exposure
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	EC10	Algae	1.78 mg/l [72 hours]
4-nonylphenol, branched	Acute - LC50	Fish	0.221 mg/l [96 hours]
	Acute - EC50	Crustaceans - Water flea - Moina macrocopa	0.044 mg/l [48 hours]
	Acute - EC50	Algae - Green algae - Raphidocelis subcapitata	0.04 mg/l [72 hours]
2-methylpropan-1-ol	Acute - EC50	Daphnia	1100 mg/l [48 hours]
2,4,6-tris (dimethylaminomethyl)phenol	Acute - LC50	Daphnia	>100 mg/l [48 hours]

English (GB) Ireland 16/21

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878

 Code
 : 000001188506
 Date of issue/Date of revision
 : 20 April 2025

 SIGMACOVER 246/410/430/620 HARDENER

SECTION 12: Ecological information

	Acute - LC50	Fish	>100 mg/l [96 hours]
ethylbenzene	Acute - EC50 - Fresh water	Daphnia	1.8 mg/l [48 hours]
	Chronic - NOEC - Fresh	Daphnia - Ceriodaphnia	1 mg/l
	water	dubia	
toluene	EC50	Daphnia	3.78 mg/l [48 hours]
	LC50	Fish	5.5 mg/l [96 hours]

Conclusion/Summary: Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose / Inoculum
2,4,6-tris (dimethylaminomethyl)phenol		4% [28 days] - Not readily	
ethylbenzene	-	79% [10 days] - Readily	

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
₹atty acids, C18-unsatd.,	-	-	Not readily
dimers, oligomeric reaction			
products with tall-oil fatty			
acids and			
triethylenetetramine			
xylene	-	-	Readily
2,4,6-tris	-	-	Not readily
(dimethylaminomethyl)phenol			
ethylbenzene	-	-	Readily
toluene	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
K ylene	3.12	7.4 to 18.5	Low
4-nonylphenol, branched	5.4	251.19	Low
2-methylpropan-1-ol	1	-	Low
2,4,6-tris(dimethylaminomethyl)phenol	0.219	-	Low
ethylbenzene	3.6	79.43	Low
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	Low
toluene	2.73	90	Low

12.4 Mobility in soil

Soil/water partition coefficient

Product/ingredient name	logKoc	Кос
2 -methylpropan-1-ol	1.08	12.0246
2,4,6-tris(dimethylaminomethyl)phenol	2.72	525.589
ethylbenzene	2.23	170.406
3,6-diazaoctanethylenediamin	1.53	33.6474

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.

English (GB)	Ireland	17/21

SIGMACOVER 246/410/430/620 HARDENER

SECTION 12: Ecological information

12.6 Endocrine disrupting properties

May cause endocrine disruption.

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	UN2920	UN2920	UN2920	UN2920
14.2 UN proper shipping name	CORROSIVE LIQUID, FLAMMABLE, N.O.S. (4-nonylphenol, branched, xylene)			

English (GB) Ireland 18/21

Code : 000001188506 Date of issue/Date of revision : 20 April 2025 **SIGMACOVER 246/410/430/620 HARDENER**

SECTION 14: Transport information

14.3 Transport hazard class(es)	8 (3)	8 (3)	8 (3)	8 (3)
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(Polyamide)	Not applicable.

Additional information

ADR/RID : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or

: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or **ADN**

≤5 kg.

: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. **IMDG**

: The environmentally hazardous substance mark may appear if required by other transportation IATA

regulations.

user

14.6 Special precautions for : 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

Intrinsic property	Ingredient name	Status		Date of revision
Indocrine disrupting properties for environment	4-nonylphenol, branched	Candidate	ED/169/2012	12/19/2012

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)
SIGMACOVER 246/410/430/620 HARDENER	3
4-nonylphenol, branched	46
toluene	48

Labelling : Not applicable.

Explosive precursors : Not applicable.

English (GB) Ireland 19/21

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878

Code : 000001188506 Date of issue/Date of revision : 20 April 2025

SIGMACOVER 246/410/430/620 HARDENER

SECTION 15: Regulatory information

Ozone depleting substances (EU 2024/590)

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category

P₅c

E1

15.2 Chemical safety

: No Chemical Safety Assessment has been carried out.

assessment

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]

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Repr. 2, H361fd	Calculation method
STOT SE 3, H335	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

English (GB) Ireland 20/21

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SIGMACOVER 246/410/430/620 HARDENER		
SECTION 16: Other in	formation	
H361d	Suspected of damaging the unborn child.	
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.	
H373	May cause damage to organs through prolonged or repeated	
	exposure.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
H411	Toxic to aquatic life with long lasting effects.	

Date of issue/Date of revision

Harmful to aquatic life with long lasting effects.

: 20 April 2025

Full text of classifications [CLP/GHS]

: 000001188506

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

History

Code

H412

Date of issue/ Date of : 20 April 2025

revision

Date of previous issue : 22 October 2024

Prepared by : EHS Version : 1.05

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.

English (GB) Ireland 21/21