SAFETY DATA SHEET

Date of issue/Date of revision

: 9 January 2023

Version : 1.01



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

1.1 Product identifier	
Product name	: SIGMAGUARD 750 BINDER
Product code	: 00444768
Product type	: Liquid.
Other means of identification	n
Not available.	
1.2 Relevant identified uses of	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	he safety data sheet
Sigma Coatings PTY 9 Arnold Street, Alrode, Alberton, Gauteng	
South Africa Tel: 0027 11 389 4800	
e-mail address of person responsible for this SDS	: PS.ACEMEA@ppg.com

1.4 Emergency telephone : +27 51 444 2134 number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: MixtureClassification according to Regulation (EC) No. 1272/2008 [CLP/GHS]Flam. Liq. 2, H225

Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 1B, H360FD STOT SE 3, H335 STOT RE 2, H373

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

Code : 00444768	Date of issue/Date of revision : 9 January 2023			
SIGMAGUARD 750 BINDER				
SECTION 2: Hazards identification				
Hazard pictograms				
Signal word	: Danger			
Hazard statements	 Highly flammable liquid and vapour. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May damage fertility. May damage the unborn child. May cause damage to organs through prolonged or repeated exposure. 			
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. Do not breathe vapour.			
Response	: IF exposed or concerned: Get medical advice or attention.			
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.			
Hazardous ingredients	: xylene crystalline silica, respirable powder (<10 microns) trimethyl borate			
Supplemental label elements	: Not applicable.			
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Restricted to professional users.			
Special packaging requireme	ents			
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	: 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.			

3.2 Mixtures

: Mixture

Conforms to Regulation (EC Code : 00444768) NO. 1907/2006 (RE		x II ate of issue/Date of revisi	on : 9 January 2	2022
SIGMAGUARD 750 BINDER					
SECTION 3: Composition/information on ingredients					
•				Specific Conc.	
Product/ingredient name	Identifiers	%	Classification	Limits, M-factors and ATEs	Туре
xy lene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥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	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	≥10 - <20	Flam. Liq. 3, H226 STOT SE 3, H336	-	[1] [2]
tetraethyl silicate	REACH #: 01-2119496195-28 EC: 201-083-8 CAS: 78-10-4 Index: 014-005-00-0	≥5.0 - ≤8.8	Flam. Liq. 3, H226 Acute Tox. 4, H332 Eye Irrit. 2, H319 STOT SE 3, H335	ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
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]
crystalline silica, respirable powder (<10 microns)	EC: 238-878-4 CAS: 14808-60-7	≥1.0 - ≤5.0	STOT RE 1, H372 (inhalation)	-	[1] [2]
methanol	REACH #: 01-2119433307-44 EC: 200-659-6 CAS: 67-56-1 Index: 603-001-00-X	≤1.7	Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370	ATE [Oral] = 100 mg/ kg ATE [Dermal] = 300 mg/kg ATE [Inhalation (vapours)] = 3 mg/l STOT SE 1, H370: C ≥ 10% STOT SE 2, H371: $3\% \le C < 10\%$	[1] [2]
trimethyl borate	EC: 204-468-9 CAS: 121-43-7 Index: 005-005-00-1	<1.0	Flam. Liq. 3, H226 Acute Tox. 4, H312 Eye Irrit. 2, H319 Repr. 1B, H360FD (oral) STOT SE 1, H370 (optic nerve)	ATE [Dermal] = 1980 mg/kg	[1] [2]
toluene	REACH #: 01-2119471310-51 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	-	[1] [2]
		English		n Africa	3/16

Conforms	s to Regulation (EC) No. 1907/20	JU6 (REACH), Annex II	
Code	: 00444768	Date of issue/Date of revision	: 9 January 2023
SIGMAG	JARD 750 BINDER		
SECTI	ON 3: Composition/infe	ormation on ingredients	
		See Section 16 for	
		the full text of the H	

statements declared

above.

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.

<u>Type</u>

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

the beson phone of mot and m	
Eye contact	: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
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	Potential acute health effects		
Eye contact :	Causes serious eye irritation.		
Inhalation :	May cause respiratory irritation.		
Skin contact :	Causes skin irritation. Defatting to the skin.		
Ingestion :	No known significant effects or critical hazards.		
Over-exposure signs/sympton	<u>15</u>		
Eye contact :	Adverse symptoms may include the following: pain or irritation watering redness		
Inhalation :	Adverse symptoms may include the following: respiratory tract irritation coughing reduced foetal weight increase in foetal deaths skeletal malformations		

Conforms to Regulation (EC)	No. 1907/2006 (REACH), Annex II
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SIGMAGUARD 750 BINDER	
SECTION 4: First aid	measures
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
4.3 Indication of any immedia	ate 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: Firefight	ting measures
5.1 Extinguishing media Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
5.2 Special hazards arising fi	rom the substance or mixture
Hazards from the substance or mixture	: Highly 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 metal oxide/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. Avoid breathing 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".		

English (GB)

South Africa

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SIGMAGUARD 750 BIND	R		
SECTION 6: Acci	ental release measures		
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 materia	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. Alternative or if water-insoluble, absorb with an inert dry material and place in an appropriate wast 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 ar		

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 See Section 1 for emergency contact information.

sections 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. 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. 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.

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SIGMAGUARD 750 BINDER			
SECTION 7: Handlin	g and storage		
Recommendations	: Not available.		
Industrial sector specific	: Not available.		

solutions

: Not available.

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	EU OEL (Europe, 1/2022). [xylene, mixed isomers] Absorbed
	through skin.
	STEL: 442 mg/m ³ 15 minutes.
	STEL: 100 ppm 15 minutes.
	TWA: 221 mg/m ³ 8 hours.
	TWA: 50 ppm 8 hours.
1-methoxy-2-propanol	EU OEL (Europe, 1/2022). Absorbed through skin.
	STEL: 568 mg/m ³ 15 minutes.
	STEL: 150 ppm 15 minutes.
	TWA: 375 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.
tetraethyl silicate	EU OEL (Europe, 1/2022).
	TWA: 5 ppm 8 hours.
	TWA: 44 mg/m ³ 8 hours.
ethylbenzene	EU OEL (Europe, 1/2022). Absorbed through skin.
	STEL: 884 mg/m ³ 15 minutes.
	STEL: 200 ppm 15 minutes.
	TWA: 442 mg/m³ 8 hours.
	TWA: 100 ppm 8 hours.
crystalline silica, respirable powder (<10 microns)	ACGIH TLV (United States, 1/2022). [Silica, crystalline]
	TWA: 0.025 mg/m ³ 8 hours. Form: Respirable
methanol	EU OEL (Europe, 1/2022). Absorbed through skin.
	TWA: 260 mg/m ³ 8 hours.
	TWA: 200 ppm 8 hours.
trimethyl borate	ACGIH TLV (United States).
	STEL: 6 mg/m ³
	TWA: 2 mg/m ³
toluene	EU OEL (Europe, 1/2022). Absorbed through skin.
	STEL: 384 mg/m ³ 15 minutes.
	STEL: 100 ppm 15 minutes.
	TWA: 192 mg/m ³ 8 hours.
	TWA: 50 ppm 8 hours.
	TWA: 50 ppm 8 hours.

Recommended monitoring : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure procedures 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.

8.2 Exposure controls

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SECTION 8: Exposu	re controls/personal protection
Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation of 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 measu	<u>ires</u>
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 Skin protection	: Chemical splash goggles.
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 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:
	Recommended: polyvinyl alcohol (PVA), Viton®, butyl rubber May be used: nitrile 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.
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.

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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 physica <u>Appearance</u>								
Physical state	ι.	Liquid.						
Colour		Grey.						
Odour		Aromatic.						
Odour threshold		Not available.						
Melting point/freezing point	- T	May start to solidify at the following temperature: $0^{\circ}C$ (32°F) This is based on data						
menting point/neezing point		for the following ingre						
Initial boiling point and boiling range	-	>37.78°C						
Flammability	1	Not available.						
Upper/lower flammability or explosive limits	1	Greatest known rang	je: Lower:	6% Upp	oer: 44% (me	ethanol)		
Flash point	:	Closed cup: 12.4°C						
Auto-ignition temperature	÷	Ingredient name		°C	°F		Method	
		1-methoxy-2-propanol		270	518			
Solubility(ies) Media Fold water	:	Result Not soluble						
Media	:	Not soluble						
Media Fold water Partition coefficient: n-octanol/	:	Not soluble Not applicable.	Vapou	ur Press	ure at 20°C	Vap	our press	sure at 50°C
Media Fold water Partition coefficient: n-octanol/ water		Not soluble	Vapou mm Hg	i	ure at 20°C Method	Vap mm Hg	our press	sure at 50°(Method
Media Fold water Partition coefficient: n-octanol/ water		Not soluble Not applicable.	-	i	1	mm	-	1
Media Fold water Partition coefficient: n-octanol/ water Vapour pressure	:	Not soluble Not applicable. Ingredient name	mm Hg 126.96	kPa 16.9	Method	mm Hg	kPa	
Media Fold water Partition coefficient: n-octanol/ water Vapour pressure Evaporation rate	:	Not soluble Not applicable.	mm Hg 126.96	kPa 16.9	Method	mm Hg	kPa	Method
Media Fold water Partition coefficient: n-octanol/ water Vapour pressure Evaporation rate Relative density	: : : :	Not soluble Not applicable. Ingredient name Image: the state of the	mm Hg 126.96 :: 2.1 (met	kPa 16.9 :hanol) V	Method Veighted ave	mm Hg erage: 0.8	kPa 3compare	Method ed with buty
Media Fold water Partition coefficient: n-octanol/ water Vapour pressure Evaporation rate Relative density Vapour density	: : : : :	Not soluble Not applicable. Ingredient name Mighest known value acetate 1.14 Highest known value	mm Hg 126.96 :: 2.1 (met :: 7.22 (Ai not explose	kPa 16.9 hanol) V ir = 1) (te	Method Weighted ave	mm Hg erage: 0.8 ate). We	kPa 3compare	Method ed with buty erage: 3.88
Media Fold water Partition coefficient: n-octanol/ water Vapour pressure Evaporation rate Relative density Vapour density Explosive properties	: : : : :	Not soluble Not applicable. Ingredient name Methanol Highest known value acetate 1.14 Highest known value (Air = 1) The product itself is n	mm Hg 126.96 :: 2.1 (met :: 7.22 (Ai not explos	kPa 16.9 hanol) V ir = 1) (te sive, but t ble.	Method Veighted ave etraethyl silic	mm Hg erage: 0.8 ate). We	kPa 3compare	Method ed with buty erage: 3.88
Media Fold water Partition coefficient: n-octanol/ water Vapour pressure Evaporation rate Relative density Vapour density Explosive properties Oxidising properties	: : : : :	Not soluble Not applicable. Ingredient name Impredient namo Impredient name <td>mm Hg 126.96 :: 2.1 (met :: 7.22 (Ai not explos</td> <td>kPa 16.9 hanol) V ir = 1) (te sive, but t ble.</td> <td>Method Veighted ave etraethyl silic</td> <td>mm Hg erage: 0.8 ate). We</td> <td>kPa 3compare</td> <td>Method ed with buty erage: 3.88</td>	mm Hg 126.96 :: 2.1 (met :: 7.22 (Ai not explos	kPa 16.9 hanol) V ir = 1) (te sive, but t ble.	Method Veighted ave etraethyl silic	mm Hg erage: 0.8 ate). We	kPa 3compare	Method ed with buty erage: 3.88
Media Øold water Partition coefficient: n-octanol/water Vapour pressure Evaporation rate Relative density Vapour density Explosive properties		Not soluble Not applicable. Ingredient name Impredient namo Impredient name <td>mm Hg 126.96 :: 2.1 (met :: 7.22 (Ai not explos</td> <td>kPa 16.9 hanol) V ir = 1) (te sive, but t ble.</td> <td>Method Veighted ave etraethyl silic</td> <td>mm Hg erage: 0.8 ate). We</td> <td>kPa 3compare</td> <td>Method ed with buty erage: 3.88</td>	mm Hg 126.96 :: 2.1 (met :: 7.22 (Ai not explos	kPa 16.9 hanol) V ir = 1) (te sive, but t ble.	Method Veighted ave etraethyl silic	mm Hg erage: 0.8 ate). We	kPa 3compare	Method ed with buty erage: 3.88
Media Fold water Partition coefficient: n-octanol/ water Vapour pressure Evaporation rate Relative density Vapour density Explosive properties Oxidising properties Particle characteristics		Not soluble Not applicable. Ingredient name methanol Highest known value acetate 1.14 Highest known value (Air = 1) The product itself is not present the product does not present the present the product does not present the produc	mm Hg 126.96 :: 2.1 (met :: 7.22 (Ai not explos	kPa 16.9 hanol) V ir = 1) (te sive, but t ble.	Method Veighted ave etraethyl silic	mm Hg erage: 0.8 ate). We	kPa 3compare	Method ed with buty erage: 3.88

Conforms to Regulation (EC)	No. 1907/2006 (REACH), Annex II
Code : 00444768 SIGMAGUARD 750 BINDER	Date of issue/Date of revision : 9 January 2023
SECTION 10: Stabilit	ty 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 metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
1-methoxy-2-propanol	LC50 Inhalation Vapour	Rat	>7000 ppm	6 hours
2	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 g/kg	-
tetraethyl silicate	LC50 Inhalation Dusts and	Rat	10 to 16 mg/l	4 hours
-	mists			
	LD50 Dermal	Rabbit	5.878 g/kg	-
	LD50 Oral	Rat	6270 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
methanol	LC50 Inhalation Vapour	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
trimethyl borate	LD50 Dermal	Rabbit	1.98 g/kg	-
	LD50 Oral	Rat	6.14 g/kg	-
toluene	LC50 Inhalation Vapour	Rat	49 g/m³	4 hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LD50 Oral	Rat	5580 mg/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion

Product/ingredient name		Result Species		Score	Exposure	Observation	
xylene		Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-	
Conclusion/Summary		1			•	I	
Skin	: There are	no data available on the r	nixture itself				
Eyes	yes : There are		nixture itself				
Respiratory	: There are	no data available on the r	nixture itself				
Sensitisation							
Conclusion/Summary							
Skin	: There are	e no data available on the	mixture itsel [:]	f.			
		English (GB)		South	Africa	10/16	

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II			
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SECTION 11: Toxic	cological information		
Respiratory	: There are no data available on the mixture itself.		
Mutagenicity			
Conclusion/Summary	: There are no data available on the mixture itself.		
Carcinogenicity			
Conclusion/Summary	: There are no data available on the mixture itself.		
Reproductive toxicity			
Conclusion/Summary	: There are no data available on the mixture itself.		
<u>Teratogenicity</u>			
Conclusion/Summary	: There are no data available on the mixture itself.		

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
tetraethyl silicate	Category 3	-	Respiratory tract irritation
methanol	Category 1	-	-
trimethyl borate	Category 1	-	optic nerve
toluene	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs
Quartz (SiO2)	Category 1	inhalation	-
toluene	Category 2	-	-

Aspiration hazard

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

Information on likely routes of exposure

:	Not available.

Potential acute health effects

Inhalation Ingestion Skin contact Eye contact Symptoms related to the phy	: : :	May cause respiratory irritation. No known significant effects or critical hazards. Causes skin irritation. Defatting to the skin. Causes serious eye irritation. cal, 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: reduced foetal weight increase in foetal deaths skeletal malformations

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Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking reduced foetal weight increase in foetal deaths skeletal malformations
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Delayed and immediate effe	cts as well as chronic effects from short and long-term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
<u>Long term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health effe	<u>ects</u>
Not available.	
Conclusion/Summary	: Not available.
General	: May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: May damage fertility. May damage the unborn child.
Other information	: Not available.
Prolonged or repeated contac	t may dry skin and cause irritation. Contains methanol . Cannot be made non-poisonous.

Prolonged or repeated contact may dry skin and cause irritation. Contains methanol. Cannot be made non-poisonous. May be fatal or cause blindness if swallowed. Sanding and grinding dusts may be harmful if inhaled. 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

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

SECTION 12: Ecological information

Product/ingredient name	Result	Species	Exposure
✓-methoxy-2-propanol	Acute LC50 23300 mg/l	Daphnia	48 hours
	Acute LC50 >4500 mg/l	Fish	96 hours
	Fresh water		
ethylbenzene	Acute EC50 1.8 mg/l Fresh	Daphnia	48 hours
	water		
	Chronic NOEC 1 mg/l Fresh	Daphnia -	-
	water	Ceriodaphnia dubia	
methanol	Acute LC50 13 mg/l Fresh	Fish	96 hours
	water		

Conclusion/Summary : There are no data available on the mixture itself.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	D	ose	Inoculum
ethylbenzene	-	79 % - Readily - 10 da	ys -		-
Conclusion/Summary : There are no data available on the mixture itself.					
Product/ingredient name		Aquatic half-life	Photolys	sis I	Biodegradability
kylene ethylbenzene toluene			- - -	F	Readily Readily Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
X lene	3.12	7.4 to 18.5	low
1-methoxy-2-propanol	<1	-	low
tetraethyl silicate	3.18	-	low
ethylbenzene	3.6	79.43	low
methanol	-0.77	-	low
trimethyl borate	-1.9	-	low
toluene	2.73	8.32	low

12.4 Mobility in soil	
Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

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

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

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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	: Yes.

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	IMDG	ΙΑΤΑ
14.1 UN number or ID number	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3	3	3
14.4 Packing group	11	11	П
14.5 Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

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

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SECTION 14: Transp	ort information
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 Transport in bulk according to IMO instruments	: Not applicable.
SECTION 15: Regula	tory information
15.1 Safety, health and enviro	onmental regulations/legislation specific for the substance or mixture
EU Regulation (EC) No. 190	<u>7/2006 (REACH)</u>
Annex XIV - List of substar	nces subject to authorisation
Annex XIV	
None of the components are	e listed.
Substances of very high c	oncern
None of the components are	e listed.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Restricted to professional users.
Other national and internati	onal regulations.
Ozone depleting substance Not listed.	<u>s (1005/2009/EU)</u>
15.2 Chemical safety assessment	: No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Indicates information that has changed from p	reviously issued version.

	H370	Causes damage to organs.
	H361d	Suspected of damaging the unborn child.
	H360FD	May damage fertility. May damage the unborn child.
	H336	May cause drowsiness or dizziness.
	H335	May cause respiratory irritation.
	H332	Harmful if inhaled.
	H331	Toxic if inhaled.
	H315	Causes skill inflation.
	H312 H315	Harmful in contact with skin. Causes skin irritation.
	H311	Toxic in contact with skin.
	H304	May be fatal if swallowed and enters airways.
	H301	Toxic if swallowed.
statements	H226	Flammable liquid and vapour.
Full text of abbreviated H	: H225	Highly flammable liquid and vapour.
	EUH state PNEC = I	Derived No Effect Level rement = CLP-specific Hazard statement Predicted No Effect Concentration rEACH Registration Number
acronyms	1272/200	
Abbreviations and		cute Toxicity Estimate

SIGMAGUARD 750 BINDER SECTION 16: Other information H412 Harmful to aquatic life with long lasting effects. Full text of classifications [CLP/GHS] : Acute Tox. 3 ACUTE TOXICITY - Category 3 Acute Tox. 4 ACUTE TOXICITY - Category 4 Aquatic Chronic 3 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 Flam. Liq. 2 FLAMMABLE LIQUIDS - Category 2 Flam. Liq. 3 FLAMMABLE LIQUIDS - Category 3 Repr. 1B REPRODUCTIVE TOXICITY - Category 1 Repr. 2 REPRODUCTIVE TOXICITY - Category 2 Skin Irrit. 2 SkiN CORROSION/IRRITATION - Category 2 Stort RE 1 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1 STOT RE 2 STOT RE 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1 STOT SE 1 STOT SE 1 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 EXPOSURE - Category 1 STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 EXPOSURE - Category 3 History Date of issue/ Date of revision To T SE	Code : 00444768		Date of issue/Date of revision	: 9 January 2023
H412 Harmful to aquatic life with long lasting effects. Full text of classifications : Acute Tox. 3 ACUTE TOXICITY - Category 3 [CLP/GHS] : Acute Tox. 4 ACUTE TOXICITY - Category 4 Aquatic Chronic 3 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 Eye Irrit. 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 Flam. Liq. 2 FLAMMABLE LIQUIDS - Category 3 Repr. 18 REPRODUCTIVE TOXICITY - Category 18 Repr. 2 REPRODUCTIVE TOXICITY - Category 2 Skin Irrit. 2 Skin CORROSION/IRRITATION - Category 2 SKIN Irrit. 3 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1 STOT RE 2 STOT SE 1 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1 STOT SE 3 STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 EXPOSURE - Category 3	SIGMAGUARD 750 BINDER			
Full text of classifications [CLP/GHS]: Acute Tox. 3 Acute Tox. 4 Aquatic Chronic 3 Asp. Tox. 1 Eye Irrit. 2 Flam. Liq. 2 Flam. Liq. 3 Repr. 1B STOT RE 2 STOT RE 1 STOT SE 3ACUTE TOXICITY - Category 3 ACUTE TOXICITY - Category 1 SPIRATION HAZARD - Category 2 FLAMMABLE LIQUIDS - Category 3 Repr. 1B SPECIFIC TARGET ORGAN TOXICITY - Category 2 Stin Irrit. 2 Stin Irrit. 2 STOT RE 1 STOT RE 2 STOT RE 1 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3HistoryDate of issue/ Date of revision: 9 January 2023 EHSPrepared by: 16 November 2021 EHS	SECTION 16: Other	information		
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Prepared by : EHS	revision			
	Date of previous issue	: 16 November 2021		
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	Version	: 1.01		

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