SAFETY DATA SHEET

Date of issue/Date of revision

: 27 October 2017 Version



: 12.03

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

1.1 Product identifier	
Product name	: SIGMA ETCH
Product code	: 00131931
Other means of identification	: Not available.

1.2 Relevant identified u	uses of the substance or mixture and uses advised against	
Product use	 Professional applications. Used by spraving 	

Product use	: Professional applications, Used by spraying.
Use of the substance/ mixture	: Coating.

1.3 Details of the supplier of the safety data sheet

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

e-mail address of person : F responsible for this SDS

: PMC.Safety@PPG.com

1.4 Emergency telephone number

Supplier

Telephone number

+31 20 4075210

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Product definition : Mixture

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

Flam. Liq. 3, H226 Skin Corr. 1, H314 Eye Dam. 1, H318 STOT SE 3, H336 Aquatic Chronic 3, H412

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

English (GB)

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SECTION 2: Hazards	identification
Hazard pictograms	
Signal word	: Danger
Hazard statements	 Flammable liquid and vapour. Causes severe skin burns and eye damage. May cause drowsiness or dizziness. Harmful to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: Wear protective gloves. Wear protective clothing. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing vapour.
Response	: IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER or physician. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	: Store in a well-ventilated place. Keep cool.
Disposal	 Not applicable. P280, P210, P261, P304 + P340, P301 + P310, P303 + P361 + P353, P305 + P351 + P338, P403, P235
Hazardous ingredients	 1-methoxy-2-propanol propan-2-ol phosphoric acid
Supplemental label elements	: Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.
Special packaging requirem	ents
Containers to be fitted with child-resistant fastenings	: Not applicable.
Tactile warning of danger	: Not applicable.
2.3 Other hazards	
Other hazards which do not result in classification	: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

Conforms to Regulation (EC) N	lo. 1907/2006 (REACH)	, Annex II, as amended by	/ Regulation (EU) No	. 2015/830
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SECTION 3: Composition/information on ingredients

			Classification	
Product/ingredient name	Identifiers	% by weight	Regulation (EC) No. 1272/2008 [CLP]	Туре
rethoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≥10 - ≤25	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
propan-2-ol	REACH #: 01-2119457558-25 EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0	≥10 - ≤25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1] [2]
phosphoric acid	REACH #: 01-2119485924-24 EC: 231-633-2 CAS: 7664-38-2 Index: 015-011-00-6	≥5.0 - ≤10	Skin Corr. 1B, H314 Eye Dam. 1, H318	[1] [2]
copper(II) carbonate– copper(II) hydroxide (1:1)	EC: 235-113-6 CAS: 12069-69-1 Index: 029-020-00-8	≥0.30 - <2.5	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)	[1]
			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 or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

[6] Additional disclosure due to company policy

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	t aid measures
Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Inhalation	 Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
Ingestion	: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

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SECTION 4: First ai	d measures
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.
	ns and effects, both acute and delayed
Potential acute health effect	
Eye contact Inhalation	 Causes serious eye damage. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	: Causes severe burns.
Ingestion	: Can cause central nervous system (CNS) depression.
Over-exposure signs/symp	
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
4.3 Indication of any immedi	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.

SECTION 5: Firefighting measures

: No specific treatment.

Specific treatments

5	5
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	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 harmful 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.

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SECTION 5: Firefighting measures

Hazardous combustion products	:	Decomposition products may include the following materials: carbon oxides phosphorus 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, pro	teo	ctive equipment and emergency procedures
For non-emergency personnel	•	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	:	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
6.3 Methods and material for o	coi	ntainment 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 non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. 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.

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830

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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). 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. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Keep away from alkalis. 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	: Storage temperature: 5 to 35°C (41 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 alkalis. Separate from oxidizing 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

Conforms to Regulation (EC) No. 1907/2006 (REACH	I), Annex II, as amended by Regulation (EU) No. 2015/830
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SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure limit values
1-methoxy-2-propanol	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed
	through skin. STEL: 560 mg/m³ 15 minutes.
	STEL: 150 ppm 15 minutes.
	TWA: 375 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.
propan-2-ol	EH40/2005 WELs (United Kingdom (UK), 12/2011).
	STEL: 1250 mg/m ³ 15 minutes.
	STEL: 500 ppm 15 minutes.
	TWA: 999 mg/m ³ 8 hours.
	TWA: 400 ppm 8 hours.
phosphoric acid	EH40/2005 WELs (United Kingdom (UK), 12/2011).
	STEL: 2 mg/m ³ 15 minutes.
	TWA: 1 mg/m ³ 8 hours.

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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

Product/ingredient name	Туре	Exposure	Value	Population	Effects
1-methoxy-2-propanol	DNEL	Short term Inhalation	553.5 mg/ m ³	Workers	Local
	DNEL	Long term Inhalation	369 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	50.6 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	• •	Consumers	Systemic
	DNEL	Long term Dermal	18.1 mg/ kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	3.3 mg/kg bw/day	Consumers	Systemic
propan-2-ol	DNEL	Long term Dermal	888 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	500 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	319 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	89 mg/m ³	Consumers	Systemic
	DNEL	Long term Oral	26 mg/kg bw/day	Consumers	Systemic

PNECs

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SECTION 8: Exposure controls/personal protection

Product/ingredient name	Туре	Compartment Detail	Value	Method Detail
1-methoxy-2-propanol	-	Fresh water	10 mg/l	Assessment Factors
	-	Marine water	1 mg/l	Assessment Factors
	-	Sewage Treatment	100 mg/l	Assessment Factors
		Plant	11. C	E au illibriume. De stitie sin s
	-	Fresh water sediment	41.6 mg/kg	Equilibrium Partitioning
	-	Marine water sediment	4.17 mg/kg	Equilibrium Partitioning
	-	Soil	2.47 mg/kg	Equilibrium Partitioning
propan-2-ol	-	Fresh water	140.9 mg/l	Assessment Factors
	-	Marine water	140.9 mg/l	Assessment Factors
	-	Secondary Poisoning	160 mg/kg	-
	-	Fresh water sediment	552 mg/kg dwt	-
	-	Marine water sediment	552 mg/kg dwt	-
	-	Sewage Treatment	2251 mg/l	Assessment Factors
		Plant		
	-	Soil	28 mg/kg dwt	-

English (GB)		United Kingdom (UK)	8/16
Other skin protection		Appropriate footwear and any additional skin protection measures should to selected based on the task being performed and the risks involved and sho approved by a specialist before handling this product.	
Body protection	:	Personal protective equipment for the body should be selected based on the being performed and the risks involved and should be approved by a speci- before handling this product. When there is a risk of ignition from static ele- wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. In European Standard EN 1149 for further information on material and design requirements and test methods.	ialist ectricity, Refer to
Gloves	:	nitrile neoprene	
Hand protection		Chemical-resistant, impervious gloves complying with an approved standar be worn at all times when handling chemical products if a risk assessment this is necessary. Considering the parameters specified by the glove manu check during use that the gloves are still retaining their protective propertie should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consist several substances, the protection time of the gloves cannot be accurately When prolonged or frequently repeated contact may occur, a glove with a class of 6 (breakthrough time greater than 480 minutes according to EN 37 recommended. When only brief contact is expected, a glove with a protect of 2 or higher (breakthrough time greater than 30 minutes according to EN recommended.	indicates ufacturer, s. It be ing of estimated. protection 74) is ion class
Skin protection			
Eye/face protection		safety showers are close to the workstation location.	DEN 166.
Individual protection meas Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical produ eating, smoking and using the lavatory and at the end of the working period Appropriate techniques should be used to remove potentially contaminated Wash contaminated clothing before reusing. Ensure that eyewash stations	d. d clothing.
Individual protection mass			
Appropriate engineering controls		Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborr contaminants below any recommended or statutory limits. The engineerin also need to keep gas, vapour or dust concentrations below any lower exp limits. Use explosion-proof ventilation equipment.	ne g controls
8.2 Exposure controls			

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830					
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SECTION 8: Exposu	re controls/personal protection				
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

9.1 Information on basic physical	l ar	nd chemical properties
<u>Appearance</u>		
Physical state	:	Liquid.
Colour	1	Not available.
Odour	1	Characteristic.
Odour threshold	1	Not available.
рН	1	1.5
Melting point/freezing point	:	May start to solidify at the following temperature: 29.32 to 42.35°C (84.8 to 108. 2°F) This is based on data for the following ingredient: Phosphoric acid, solution. Weighted average: -27.74°C (-17.9°F)
Initial boiling point and boiling range	:	>37.78°C
Flash point	:	Closed cup: 30.5°C
Evaporation rate	;	Highest known value: 1.7 (Isopropyl alcohol) Weighted average: 1.25compared with butyl acetate
Material supports combustion.	:	Yes.
Flammability (solid, gas)	:	liquid
Upper/lower flammability or explosive limits	1	Createst known range: Lower: 1.48% Upper: 13.74% (1-methoxy-2-propanol)
Vapour pressure	1	Highest known value: 4.4 kPa (33 mm Hg) (at 20°C) (Isopropyl alcohol). Weighted average: 2.78 kPa (20.85 mm Hg) (at 20°C)
Vapour density	1	Highest known value: 3.11 (Air = 1) (1-methoxy-2-propanol). Weighted average: 2.61 (Air = 1)
Relative density	:	0.98
Solubility(ies)	:	Partially soluble in the following materials: cold water.
Partition coefficient: n-octanol/ water	1	Not applicable.
Auto-ignition temperature	:	300°C
Decomposition temperature	:	Stable under recommended storage and handling conditions (see Section 7).
Viscosity	:	Kinematic (40°C): >0.21 cm²/s
Explosive properties	:	Product does not present an explosion hazard.
Oxidising properties	1	Product does not present an oxidizing hazard.

9.2 Other information

No additional information.

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830

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SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
I −methoxy-2-propanol	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 g/kg	-
propan-2-ol	LC50 Inhalation Vapour	Rat	72600 mg/m ³	4 hours
	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	4.396 g/kg	-
phosphoric acid	LD50 Dermal	Rabbit	2.74 g/kg	-
	LD50 Oral	Rat	1.25 g/kg	-
copper(II) carbonate– copper(II) hydroxide (1:1)	LD50 Oral	Rat	1350 mg/kg	-

Conclusion/Summary

: There are no data available on the mixture itself.

Acute toxicity estimates

Route	ATE value
Oral	135000 mg/kg
Inhalation (vapours)	1100 mg/l

Irritation/Corrosion	
Conclusion/Summary	
Skin	: There are no data available on the mixture itself.
Eyes	: There are no data available on the mixture itself.
Respiratory	: There are no data available on the mixture itself.
Sensitisation	
Conclusion/Summary	
Skin	: There are no data available on the mixture itself.
Respiratory	: There are no data available on the mixture itself.
Mutagenicity	
Conclusion/Summary	: There are no data available on the mixture itself.
Carcinogenicity	
<u></u>	

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830 Code : 00131931 Date of issue/Date of revision : 27 October 2017 SIGMA ETCH SECTION 11: Toxicological information **Conclusion/Summary** : There are no data available on the mixture itself. **Reproductive toxicity Conclusion/Summary** : There are no data available on the mixture itself. **Teratogenicity Conclusion/Summary** : There are no data available on the mixture itself. Specific target organ toxicity (single exposure) Product/ingredient name Category **Route of Target organs** exposure 1-methoxy-2-propanol Category 3 Not applicable. Narcotic effects Not applicable. Narcotic effects propan-2-ol Category 3 Specific target organ toxicity (repeated exposure) Not available. **Aspiration hazard** Not available. Information on likely : Not available. routes of exposure Potential acute health effects Inhalation Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. Ingestion : Can cause central nervous system (CNS) depression. Skin contact : Causes severe burns. Eye contact : Causes serious eye damage. Symptoms related to the physical, chemical and toxicological characteristics Inhalation : Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness Ingestion : Adverse symptoms may include the following: stomach pains Skin contact : Adverse symptoms may include the following: pain or irritation redness blistering may occur : Adverse symptoms may include the following: Eye contact pain watering redness Delayed and immediate effects as well as chronic effects from short and long-term exposure Short term exposure **Potential immediate** : Not available. effects Potential delayed effects : Not available. Long term exposure **Potential immediate** : Not available. effects Potential delayed effects : Not available. English (GB) United Kingdom (UK) 11/16

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SECTION 11: Toxicological information

Potential chronic health effects

Not available.

Conclusion/Summary	: Not available.
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.
Other information	: Not available.

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
1-methoxy-2-propanol	Acute LC50 23300 mg/l Acute LC50 >4500 mg/l Fresh water	Daphnia Fish	48 hours 96 hours
propan-2-ol	Acute EC50 10100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

Conclusion/Summary

: There are no data available on the mixture itself.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
propan-2-ol	0.05	-	low

12.4 Mobility in soil

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

12.5 Results of PBT and vPvB assessment

English	(GB)
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SECTION 12: Ecological information

PBT: Not applicable.vPvB: Not applicable.

12.6 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 : 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 shoul taken when handling emptied containers that have not been cleaned or rinsed Empty containers or liners may retain some product residues. Vapour from presidues may create a highly flammable or explosive atmosphere inside the		

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.

14. Transport information

	ADR/RID	ADN	IMDG	IATA	
14.1 UN number	3470	3470	3470	3470	
14.2 UN proper shipping name	PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE	PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE	PAINT RELATED MATERIAL CORROSIVE, FLAMMABLE	PAINT RELATED MATERIAL CORROSIVE, FLAMMABLE	
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	No.	Yes.	No.	No.	
English (GB) United Kingdom (UK) 13				13/16	

Conforms to Re	gulation (EC) No. 1907/2006	(REACH), Annex II, as a	mended by Regulation	(EU) No. 2015/830
Code : 00131931 SIGMA ETCH		Date of issue/Date of revision : 27 October 2017		27 October 2017
14. Trans	port information			
Marine pollutar substances	nt Not applicable.	Not applicable.	Not applicable.	Not applicable.
Additional infor	mation			
ADR/RID	ADR/RID : None identified.			
ADN	: The product is only regulated as an environmentally hazardous substance when transported in tank vessels.			when transported in
IMDG	: None identified.	None identified.		
IATA	: None identified.	None identified.		
user upright and se			always transport in close sons transporting the proc	
14.7 Transport in bulk: Not applicabaccording to Annex II ofMarpol and the IBC Code		ble.		

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

Ozone depleting substances (1005/2009/EU) Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category

P5c: Flammable liquids 2 and 3 not falling under P5a or P5b 6: Flammable (R10)

15.2 Chemical safety assessment

: No Chemical Safety Assessment has been carried out.

Code	: 00131931	Date of issue/Date of revision	: 27 October 2017
SIGMA ETC	СН		

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. 1, H314	On basis of test data
Eye Dam. 1, H318	On basis of test data
STOT SE 3, H336	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

H226 H302 H314 H318 H319	Highly flammable liquid and vapour. Flammable liquid and vapour. Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Causes serious eye irritation. Harmful if inhaled.
	Harmful if inhaled. May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
	Very toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

A T	
Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation) - Category 4
Aquatic Acute 1, H400	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1, H410	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 3, H412	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3
Skin Corr. 1, H314	SKIN CORROSION/IRRITATION - Category 1
Skin Corr. 1B, H314	SKIN CORROSION/IRRITATION - Category 1B
STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE
	(Narcotic effects) - Category 3

History	

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revision	

English (GB)		United Kingdom (UK)	
Prepared by	: EHS		
Date of previous issue	: 23 July 2017		

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SECTION 16: Other information

Version

: 12.03

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