# SAFETY DATA SHEET

Date of issue/Date of revision : 18 December 2018 Version : 14



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

1.1 Product identifier

Product name : SIGMAFAST HS ENAMEL BASE BASE L

Product code : 00199438

Other means of : Not available.

identification

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

**Product use** : Professional applications, Used by spraying.

Use of the substance/

mixture

: Coating.

#### 1.3 Details of the supplier of the safety data sheet

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

Telephone +32-33606311 Fax +32-33606435

e-mail address of person responsible for this SDS

: PMC.Safety@PPG.com

#### 1.4 Emergency telephone number

**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]

Fam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 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

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## **SECTION 2: Hazards identification**

**Hazard pictograms** 





Signal word : Warning

**Hazard statements** : Fammable liquid and vapour. Causes serious eye irritation.

Causes skin irritation.

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.

Response : 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, P303 + P361 + P353, P305 + P351 + P338, P403, P235

Hazardous ingredients

Supplemental label

elements

: Not applicable.

: Contains Fatty acids, C14-18 and C16-18-unsatd., maleated and 2-butanone oxime.

May produce an allergic reaction.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

**Special packaging requirements** 

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

: Prolonged or repeated contact may dry skin and cause irritation.

# **SECTION 3: Composition/information on ingredients**

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	% by weight	Classification  Regulation (EC) No. 1272/2008 [CLP]	Туре
viene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - <20	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	[1] [2]

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# **SECTION 3: Composition/information on ingredients**

OLOTION 3. Composition		Calcillo		
Solvent naphtha (petroleum),	EC: 265-198-5	≥1.0 - ≤5.0	STOT SE 3, H336	[1]
heavy arom. Nota(s) P	CAS: 64742-94-5		Asp. Tox. 1, H304	
	Index: 649-424-00-3		Aquatic Chronic 2, H411 EUH066	
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≥1.0 - ≤5.0	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
2-methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	≥1.0 - ≤5.0	Flam. Liq. 3, H226	[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	[1] [2]
(ethyl-3-oxobutanoato-O'1,O'3) (2-dimethylaminoethanolato) (1-methoxypropan-2-olato) aluminium(III), dimerised	EC: 402-370-2 CAS: 149057-70-5 Index: 013-006-00-3	≥0.30 - ≤2.9	Flam. Liq. 3, H226 Eye Dam. 1, H318	[1]
naphthalene	EC: 202-049-5 CAS: 91-20-3 Index: 601-052-00-2	<1.0	Acute Tox. 4, H302 Carc. 2, H351 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1] [2]
2-butanone oxime	REACH #: 01-2119539477-28 EC: 202-496-6 CAS: 96-29-7 Index: 616-014-00-0	≤0.30	Acute Tox. 4, H312 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351	[1]
Fatty acids, C14-18 and C16-18-unsatd., maleated	REACH #: 01-2119978273-29 EC: 288-306-2 CAS: 85711-46-2	≤0.30	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317	[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.

#### Type

- [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.

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## **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

**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. It

may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

#### 4.2 Most important symptoms and effects, both acute and delayed

#### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.
 Skin contact : Causes skin irritation. Defatting to the skin.
 Ingestion : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact**: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : No specific data.

**Skin contact**: Adverse symptoms may include the following:

irritation redness dryness cracking

**Ingestion**: No specific data.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

**Specific treatments**: No specific treatment.

# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing

media

: Use dry chemical, CO<sub>2</sub>, 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

#### 5.3 Advice for firefighters

fighters

Special precautions for fire- : 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

metal oxide/oxides

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".

#### **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 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.

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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 ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. 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. Empty containers retain product residue and can be hazardous. Do not reuse container.

Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.

# 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. Eliminate all ignition sources. 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** 

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# **SECTION 8: Exposure controls/personal protection**

Product/ingredient name	Exposure limit values
xylene	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed
	through skin.
	STEL: 441 mg/m³ 15 minutes.
	STEL: 100 ppm 15 minutes.
	TWA: 220 mg/m³ 8 hours.
	TWA: 50 ppm 8 hours.
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/m³ 8 hours.
	TWA: 100 ppm 8 hours.
2-methoxy-1-methylethyl acetate	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed
	through skin.
	STEL: 548 mg/m³ 15 minutes.
	STEL: 100 ppm 15 minutes.
	TWA: 274 mg/m³ 8 hours.
	TWA: 50 ppm 8 hours.
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed
	through skin.
	STEL: 552 mg/m³ 15 minutes.
	STEL: 125 ppm 15 minutes.
	TWA: 441 mg/m³ 8 hours.
non lette a la na	TWA: 100 ppm 8 hours.
naphthalene	EU OEL (Europe, 2/2017).
	TWA: 50 mg/m³ 8 hours.
	TWA: 10 ppm 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	Type	Exposure	Value	Population	Effects
xylene	DNEL	Short term Inhalation	289 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	289 mg/m³	Workers	Local
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	174 mg/m³	Consumers	Systemic
	DNEL	Short term Inhalation	174 mg/m³	Consumers	Local
	DNEL	Long term Dermal	108 mg/kg	Consumers	Systemic

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# **SECTION 8: Exposure controls/personal protection**

ECTION 8: Exposure con	trois/p	ersonai protec			
			bw/day		
	DNEL	Long term Inhalation	14.8 mg/m³	Consumers	Systemic
	DNEL	Long term Oral	1.6 mg/kg bw/day	Consumers	Systemic
1-methoxy-2-propanol	DNEL	Short term Inhalation	553.5 mg/ m <sup>3</sup>	Workers	Local
	DNEL	Long term	369 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	50.6 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	43.9 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Dermal	18.1 mg/	Consumers	Systemic
	DNEL	Long term Oral	kg bw/day 3.3 mg/kg	Consumers	Systemic
2-methoxy-1-methylethyl acetate	DNEL	Long term Inhalation	bw/day 275 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	153.5 mg/ kg	Workers	Systemic
	DNEL	Long term Oral	1.67 mg/kg	Consumers	Systemic
	DNEL	Long term Inhalation	33 mg/m³	Consumers	Systemic
	DNEL	Long term Dermal	54.8 mg/kg	Consumers	Systemic
ethylbenzene	DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	293 mg/m³	Workers	Local
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	15 mg/m³	Consumers	Systemic
	DNEL	Long term Oral	1.6 mg/kg bw/day	Consumers	Systemic
2-butanone oxime	DNEL	Long term Inhalation	9 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	3.33 mg/m³	Workers	Local
	DNEL	Long term Dermal	1.3 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	2.5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	2.7 mg/m³	Consumers	Systemic
	DNEL	Long term Inhalation	2 mg/m³	Consumers	Local
	DNEL	Long term Dermal	0.78 mg/ kg bw/day	Consumers	Systemic
	DNEL	Short term Dermal	1.5 mg/kg bw/day	Consumers	Systemic
1		1			

**PNECs** 

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# **SECTION 8: Exposure controls/personal protection**

Product/ingredient name	Type	Compartment Detail	Value	Method Detail
xylene	-	Fresh water	0.327 mg/l	-
	_	Marine water	0.327 mg/l	-
	-	Sewage Treatment	6.58 mg/l	-
		Plant		
	-	Fresh water sediment	12.46 mg/kg dwt	-
	-	Marine water sediment	12.46 mg/kg dwt	-
	-	Soil	2.31 mg/kg	-
1-methoxy-2-propanol	-	Fresh water	10 mg/l	Assessment Factors
	-	Marine water	1 mg/l	Assessment Factors
	-	Sewage Treatment	100 mg/l	Assessment Factors
		Plant		
	-	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
2-methoxy-1-methylethyl acetate	-	Fresh water	0.635 mg/l	-
	-	Marine water	0.0635 mg/l	-
	-	Fresh water sediment	3.29 mg/kg	-
	-	Marine water sediment	0.329 mg/kg	-
	-	Soil	0.29 mg/kg	-
	-	Sewage Treatment	100 mg/l	-
		Plant		
ethylbenzene	-	Fresh water	0.1 mg/l	Assessment Factors
	-	Marine water	0.01 mg/l	Assessment Factors
	-	Sewage Treatment	9.6 mg/l	Assessment Factors
		Plant		
	-	Fresh water sediment	13.7 mg/kg dwt	Equilibrium Partitioning
	-	Marine water sediment	1.37 mg/kg dwt	Equilibrium Partitioning
	-	Soil	2.68 mg/kg dwt	Equilibrium Partitioning
O bustoness outro	-	Secondary Poisoning	20 mg/kg	Accesses and Factors
2-butanone oxime	-	Fresh water	0.256 mg/l	Assessment Factors
	-	Sewage Treatment	177 mg/l	Assessment Factors
		Plant		

#### 8.2 Exposure controls

Appropriate engineering controls

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

#### **Individual protection measures**

**Hygiene measures** 

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Skin protection

Hand protection

: Chemical splash goggles. 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.

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## **SECTION 8: Exposure controls/personal protection**

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:

Not recommended: nitrile rubber May be used: Chloroprene

Recommended: polyvinyl alcohol (PVA), Viton®, 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 anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to

European Standard EN 1149 for further information on material and design

requirements and test methods.

Other skin protection Appropriate footwear and any additional skin protection measures should be

selected based on the task being performed and the risks involved and should be

approved by a specialist before handling this product.

**Respiratory protection**: Respirator selection must be based on known or anticipated exposure levels, the

hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapour

(Type A) and particulate filter P3

**Environmental exposure**: Emissions

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 processed to reduce a principle to account 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 and chemical properties

**Appearance** 

Physical state : Liquid.

Colour : Various

Odour : Characteristic.

Odour threshold : Not available.

pH : insoluble in water.

Melting point/freezing point : May start to solidify at the following temperature: -49°C (-56.2°F) This is based on

data for the following ingredient: Solvent naphtha (petroleum), heavy arom..

Weighted average: -84.1°C (-119.4°F)

Initial boiling point and boiling

range

: >37.78°C

Flash point : Closed cup: 32°C

**Evaporation rate** : Highest known value: 0.84 (ethylbenzene) Weighted average: 0.79compared

with butyl acetate

Material supports combustion. : Yes.

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# SECTION 9: Physical and chemical properties

: liquid

Flammability (solid, gas)

**Upper/lower flammability or** 

explosive limits

: Greatest known range: Lower: 1.48% Upper: 13.74% (1-methoxy-2-propanol)

: Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted Vapour pressure

average: 0.77 kPa (5.78 mm Hg) (at 20°C)

Vapour density : Highest known value: 4.6 (Air = 1) (2-methoxy-1-methylethyl acetate). Weighted

average: 3.72 (Air = 1)

Relative density

Solubility(ies) : Insoluble in the following materials: cold water.

Partition coefficient: n-octanol/ : Not applicable.

water

: 280°C **Auto-ignition temperature** 

**Decomposition temperature** 

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

**Viscosity** 

Kinematic (room temperature): >4 cm<sup>2</sup>/s

Kinematic (40°C): >0.21 cm<sup>2</sup>/s

**Viscosity** : 40 - <60 s (ISO 6mm)

: The product itself is not explosive, but the formation of an explosible mixture of **Explosive properties** 

vapour or dust with air is possible.

: Product does not present an oxidizing hazard. Oxidising properties

#### 9.2 Other information

No additional information.

# SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition

products.

Refer to protective measures listed in sections 7 and 8.

10.5 Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions:

oxidising agents, strong alkalis, strong acids.

10.6 Hazardous Depending on conditions, decomposition products may include the following

decomposition products materials: carbon oxides metal oxide/oxides

# **SECTION 11: Toxicological information**

11.1 Information on toxicological effects

**Acute toxicity** 

**United Kingdom (UK)** 11/18 English (GB)

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# **SECTION 11: Toxicological information**

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LD50 Dermal	Rabbit	>1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
Solvent naphtha (petroleum), heavy arom. Nota(s) P	LD50 Oral	Rat	3.2 g/kg	-
1-methoxy-2-propanol	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 g/kg	-
2-methoxy-1-methylethyl acetate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	8532 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	-
naphthalene	LD50 Dermal	Rabbit	>20 g/kg	_
·	LD50 Oral	Rat	490 mg/kg	-
2-butanone oxime	LD50 Oral	Rat	930 mg/kg	-

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

# **Acute toxicity estimates**

Route	ATE value
Dermal Inhalation (vapours)	8179.2 mg/kg 72.34 mg/l

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	

#### **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** 

**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 exposure	Target organs
Solvent naphtha (petroleum), heavy arom. Nota(s) P	Category 3	Not applicable. Not applicable. Not applicable.	Respiratory tract irritation Narcotic effects Narcotic effects

#### Specific target organ toxicity (repeated exposure)

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# **SECTION 11: Toxicological information**

Product/ingredient name	Category	Route of exposure	Target organs
<b>e</b> thylbenzene	Category 2	Not determined	hearing organs

#### **Aspiration hazard**

Product/ingredient name	Result
xylene Solvent naphtha (petroleum), heavy arom. Nota(s) P ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on likely routes of exposure

: Not available.

#### Potential acute health effects

Inhalation: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.Skin contact: Causes skin irritation. Defatting to the skin.

**Eye contact** : Causes serious eye irritation.

#### Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No specific data.Ingestion: No specific data.

**Skin contact**: Adverse symptoms may include the following:

irritation redness dryness cracking

**Eye contact**: Adverse symptoms may include the following:

pain or irritation 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.

## Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General: 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.

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.

No known significant effects or critical hazards.

Other information : Not available.

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# SECTION 11: Toxicological information

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.

Contains 2-butanone oxime, Fatty acids, C14-18 and C16-18-unsatd., maleated. May produce an allergic reaction.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Solvent naphtha (petroleum), heavy arom. Nota(s)	NOEL 0.48 mg/l Fresh water	Daphnia	21 days
1-methoxy-2-propanol	Acute LC50 23300 mg/l	Daphnia	48 hours
	Acute LC50 >4500 mg/l	Fish	96 hours
	Fresh water		
2-methoxy-1-methylethyl acetate	Acute LC50 161 mg/l Fresh water	Fish	96 hours
ethylbenzene	Acute LC50 150 to 200 mg/l	Fish - Lepomis	96 hours
	Fresh water	macrochirus - Young of the year	

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

#### 12.2 Persistence and degradability

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene	-	-	Readily
ethylbenzene	-	-	Readily

#### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
<b>x</b> ylene	3.16	7.4 to 18.5	low
2-methoxy-1-methylethyl acetate	0.56	-	low
ethylbenzene	3.15	79.43	low
naphthalene	3.3	85.11	low
2-butanone oxime	0.63	5.01	low

#### 12.4 Mobility in soil

Soil/water partition : Not available.

coefficient (Koc)

Mobility : Not available.

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# **SECTION 12: Ecological information**

#### 12.5 Results of PBT and vPvB assessment

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 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.

# 14. Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III

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# 14. Transport information

<u> </u>				
14.5	No.	Yes.	No.	No.
Environmental hazards				
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.

#### **Additional information**

ADR/RID: This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.

1.5.1.

Tunnel code : (D/E)

**ADN** : The product is only regulated as an environmentally hazardous substance when transported in

tank vessels. This class 3 viscous liquid is not subject to regulation in packagings up to  $450\ L$ 

according to 2.2.3.1.5.1.

**IMDG** : This class 3 viscous liquid is not subject to regulation in packagings up to 30 L according to 2.3.2.5.

: None identified.

14.6 Special precautions for

user

: **Transport within user's premises**: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

: Not applicable.

# **SECTION 15: Regulatory information**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

**Annex XIV** 

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : 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	

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## **SECTION 15: Regulatory information**

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
<b>F</b> am. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Aquatic Chronic 3, H412	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.
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.
H351	Suspected of causing cancer.
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.
H412	Harmful to aquatic life with long lasting effects.

#### Full text of classifications [CLP/GHS]

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## **SECTION 16: Other information**

Acute Tox. 4, H302
Acute Tox. 4, H312
Acute Tox. 4, H312
Acute Tox. 4, H332
Acute Tox. 4, H332
Acute Tox. 4, H332
Aquatic Acute 1, H400
Aquatic Chronic 1, H410
Aquatic Chronic 2, H411
Aquatic Chronic 3, H412

Acute Tox. 4, H332
ACUTE TOXICITY (inhalation) - Category 4
ACUTE TOXICITY (inhalation) - Category 4
SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3

Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1 CARCINOGENICITY - Category 2

EUH066 Repeated exposure may cause skin dryness or cracking. Eye Dam. 1, H318 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

Flam. Liq. 2, H225
Flam. Liq. 3, H226
FLAMMABLE LIQUIDS - Category 3
FLAMMABLE LIQUIDS - Category 3

Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2

Skin Sens. 1, H317 Skin Sens. 1B, H317 SKIN SENSITISATION - Category 1 SKIN SENSITISATION - Category 1B

STOT RE 2, H373 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE

Category 2

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

(Respiratory tract irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

(Narcotic effects) - Category 3

**History** 

**STOT SE 3, H335** 

**STOT SE 3, H336** 

Date of issue/ Date of : 18 December 2018

revision

Date of previous issue : 6 December 2018

Prepared by : EHS Version : 14

#### **Disclaimer**

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