SAFETY DATA SHEET

Date of issue/Date of revision

: 11 July 2017

Version : 13.05



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

1.1 Product identifier	
Product name	: SIGMAZINC 11 GREY
Product code	: 00312622
Other means of identification	: Not available.
1.2 Relevant identified uses	of the substance or mixture and uses advised against
Product use	: Professional applications, Used by spraying.
Use of the substance/ mixture	: Coating.
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 responsible for this SDS	: PMC.Safety@PPG.com
1.4 Emergency telephone nu	umber
Supplier	
Telephone number +31 20 4075210	:

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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 : 00312622 SIGMAZINC 11 GREY	Date of issue/Date of revision : 11 July 2017
SECTION 2: Hazar	ds identification
Hazard pictograms	
Signal word	: Warning
Hazard statements	 Flammable liquid and vapour. Causes serious eye irritation. Causes skin irritation. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.
Precautionary statement	<u>S</u>
Prevention	: Wear protective gloves. Wear 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 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, P260, P305 + P351 + P338, P403, P235
Hazardous ingredients	: xylene
Supplemental label elements	: Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market an use of certain dangerous substances, mixtures and articles	
Special packaging requir Containers to be fitted with child-resistant fastenings	ements : Not applicable.

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			
			Classification	
Product/ingredient name	Identifiers	% by weight	Regulation (EC) No. 1272/2008 [CLP]	Туре
English (GB)	United	Kingdom (UK)		2/1

Code : 00312622 SIGMAZINC 11 GREY	Date of issue	/Date of revisio	on : 11 July 2017	
SECTION 3: Compositi	on/information on ingr	redients		
zinc powder zinc dust (stabilised)	EC: 231-175-3 CAS: 7440-66-6 Index: 030-001-01-9	≥50 - ≤75	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - ≤18	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 (central nervous system (CNS), kidneys, liver) Asp. Tox. 1, H304	[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	[1] [2]
ethanol	REACH #: 01-2119457610-43 EC: 200-578-6 CAS: 64-17-5 Index: 603-002-00-5	≥1.0 - ≤5.0	Flam. Liq. 2, H225	[2]
1-nitropropane	EC: 203-544-9 CAS: 108-03-2 Index: 609-001-00-6	≥1.0 - ≤5.0	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332	[1]
zinc oxide	REACH #: 01-2119463881-32 EC: 215-222-5 CAS: 1314-13-2 Index: 030-013-00-7	≥1.0 - ≤5.0	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
tetraethyl silicate	EC: 201-083-8 CAS: 78-10-4 Index: 014-005-00-0	≤1.8	Flam. Liq. 3, H226 Acute Tox. 4, H332 Eye Irrit. 2, H319 STOT SE 3, H335	[1]
2-dimethylaminoethanol	REACH #: 01-2119492298-24 EC: 203-542-8 CAS: 108-01-0 Index: 603-047-00-0	<1.0	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 3, H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335	[1] [2]
			See Section 16 for the full text of the H statements declared	

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.

<u>Type</u>

[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

above.

Code	: 00312622	Date of issue/Date of revision	: 11 July 2017
SIGMAZINC	11 GREY		

SECTION 3: Composition/information on ingredients

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

4.1 Description of first aid measures Eye contact : 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.

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.
<u>Over-exposure signs/</u>	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.

· · · · · · · · · · · · · · · · · · ·	
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed.
	The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Code	: 00312622	Date of issue/Date of revision	: 11 July 2017	
SIGMAZINC	11 GREY			

SECTION 5: Firefighting 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 fr	om	the substance or mixture
Hazards from the substance or mixture	:	Flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products	:	Decomposition products may include the following materials: carbon oxides nitrogen oxides 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, prote	ective 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".	
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 environmer pollution (sewers, waterways, soil or air). Water polluting material. May be harm to the environment if released in large quantities. Collect spillage.	ntal
6.3 Methods and material for co	ontainment and cleaning up	
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools a 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 a appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.	
English (GB)	United Kingdom (UK)	5/18

Code	: 00312622	Date of issue/Date of revision	: 11 July 2017
SIGMAZINC	11 GREY		

SECTION 6: Accidental release measures

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

SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8). 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. Avoid release to the environment. Refer to special instructions/safety data sheet. 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.
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: 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.
7.3 Specific end use(s) Recommendations	:	Not available.
Industrial sector specific solutions		Not available.

Code	: 00312622	Date of issue/Date of revision	: 11 July 2017
SIGMAZINC	11 GREY		

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	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed
	through skin.
	STEL: 441 mg/m ³ 15 minutes.
	STEL: 100 ppm 15 minutes.
	TWA: 220 mg/m ³ 8 hours.
	TWA: 50 ppm 8 hours.
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed
-	through skin.
	STEL: 552 mg/m ³ 15 minutes.
	STEL: 125 ppm 15 minutes.
	TWA: 441 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.
ethanol	EH40/2005 WELs (United Kingdom (UK), 12/2011).
	TWA: 1920 mg/m ³ 8 hours.
	TWA: 1000 ppm 8 hours.
2-dimethylaminoethanol	EH40/2005 WELs (United Kingdom (UK), 12/2011).
	STEL: 22 mg/m ³ 15 minutes.
	STEL: 6 ppm 15 minutes.
	TWA: 7.4 mg/m ³ 8 hours.
	TWA: 2 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	Туре	Exposure	Value	Population	Effects
xylene	DNEL	Short term Inhalation	289 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	289 mg/m ³	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
English (GB)		United Kingdom	ו (UK)		7/

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

SECTION 8: Exposure controls/personal protection

	010/P		•		1
			bw/day		
	DNEL	Long term	14.8 mg/m ³	Consumers	Systemic
		Inhalation			
	DNEL	Long term Oral	1.6 mg/kg	Consumers	Systemic
		Ŭ	bw/day		5
ethylbenzene	DNEL	Long term	77 mg/m ³	Workers	Systemic
Chrynoenzene	DIVLL	Inhalation	77 mg/m	Workers	Gysternie
	DNEL		293 mg/m³	Workers	
	DINEL	Short term	295 mg/m	VVOIKEIS	Local
		Inhalation	400 "		
	DNEL	Long term Dermal	180 mg/kg	Workers	Systemic
			bw/day	_	
	DNEL	Long term	15 mg/m³	Consumers	Systemic
		Inhalation			
	DNEL	Long term Oral	1.6 mg/kg	Consumers	Systemic
			bw/day		
ethanol	DNEL	Long term	950 mg/m ³	Workers	Systemic
		Inhalation	••••		
	DNEL	Long term Dermal	343 mg/kg	Workers	Systemic
		Long term Derma	bw/day	VV OINCI 3	- Systemic
	DNEL	Long torm		Concumera	Svetomia
	DNEL	Long term	114 mg/m ³	Consumers	Systemic
		Inhalation		•	
	DNEL	Long term Dermal	206 mg/kg	Consumers	Systemic
			bw/day		
	DNEL	Long term Oral	87 mg/kg	Consumers	Systemic
		-	bw/day		
	DNEL	Short term	950 mg/m ³	Consumers	Local
		Inhalation	Ŭ		
	DNEL	Short term	1900 mg/	Workers	Local
	DITLE	Inhalation	m ³	Workere	2000
zinc oxide	DNEL	Long term	5 mg/m ³	Workers	Systemic
	DINLL	Inhalation	5 mg/m	WUIKEIS	Systemic
			0.5 mm m /mm 3	Canadimaana	Quatamia
	DNEL	Long term	2.5 mg/m³	Consumers	Systemic
		Inhalation			
	DNEL	Long term Oral	0.83 mg/	Consumers	Systemic
			kg bw/day		
	DNEL	Long term Dermal	87 mg/kg	Consumers	Systemic
			bw/day		
	DNEL	Long term Dermal	87 mg/kg	Workers	Systemic
			bw/day		
2-dimethylaminoethanol	DNEL	Long term	7.4 mg/m ³	Workers	Systemic
		Inhalation	· · · · · · · · · · · · · · · · · · ·		
	DNEL	Short term	22 mg/m³	Workers	Systemic
	DINEL		22 mg/m²	VVUIKEIS	Systemic
		Inhalation	7 4		
	DNEL	Long term	7.4 mg/m³	Workers	Local
		Inhalation			
	DNEL	Short term	22 mg/m³	Workers	Local
		Inhalation			
	DNEL	Long term Dermal	1.04 mg/	Workers	Systemic
			kg bw/day		
		1		Workers	Systemic
	DNFL	Short term Dermal	5 mu/ku	vvorkers	
	DNEL	Short term Dermal	5 mg/kg bw/day	WORKERS	e yeternie
			bw/day		
	DNEL DNEL	Short term Dermal Long term Inhalation		Consumers	Systemic

PNECs

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

Code : 00312622 SIGMAZINC 11 GREY Date of issue/Date of revision

: 11 July 2017

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Туре	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	-
ethylbenzene	-	Fresh water	0.1 mg/l	Assessment Factors
	-	Marine water	0.01 mg/l	Assessment Factors
	-	Sewage Treatment Plant	9.6 mg/l	Assessment Factors
	-	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
	-	Secondary Poisoning	20 mg/kg	-
ethanol	-	Fresh water	0.96 mg/l	Assessment Factors
	-	Marine water	0.79 mg/l	Assessment Factors
	-	Sewage Treatment Plant	580 mg/l	Assessment Factors
	-	Fresh water sediment	3.6 mg/kg dwt	Equilibrium Partitioning
	-	Marine water sediment	2.9 mg/kg dwt	Equilibrium Partitioning
	-	Soil	0.63 mg/kg dwt	Assessment Factors
zinc oxide	-	Fresh water	20.6 µg/l	Sensitivity Distribution
	-	Marine water	6.1 µg/l	Sensitivity Distribution
	-	Fresh water sediment	117 mg/kg dwt	Sensitivity Distribution
	-	Sewage Treatment	52 µg/l	Assessment Factors
		Plant		
	-	Marine water sediment	56.5 mg/kg dwt	Assessment Factors
	-	Soil	35.6 mg/kg dwt	Sensitivity Distribution
2-dimethylaminoethanol	-	Fresh water	0.066 mg/l	Assessment Factors
	-	Marine water	0.007 mg/l	Assessment Factors
	-	Sewage Treatment Plant	10 mg/l	Assessment Factors
	-	Fresh water sediment	0.053 mg/kg dwt	Equilibrium Partitioning
	-	Soil	0.018 mg/kg dwt	Equilibrium Partitioning

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 measur	es	
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	:	Chemical splash goggles.
Skin protection		
Hand protection	:	

Code	: 00312622	Date of issue/Date of revision	: 11 July 2017
SIGMAZIN	IC 11 GREY		

SECTION 8: Exposure controls/personal 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.
Gloves	:	For prolonged or repeated handling, use the following type of gloves:
		May be used: nitrile rubber Recommended: butyl rubber, polyvinyl alcohol (PVA), Viton®
Body protection		Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
Other skin protection		Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection		Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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

<u>Appearance</u>		
Physical state	: Liquid.	
Colour	: Grey.	
Odour	: Aromatic.	
Odour threshold	: Not available.	
рН	: insoluble in water.	
Melting point/freezing point	: May start to solidify at the following temperature: -82.5°C (-11) on data for the following ingredient: tetraethyl silicate. Weighte 33°C (-143.2°F)	,
Initial boiling point and boiling range	: >37.78°C	
Flash point	: Closed cup: 25°C	
English (GB)	United Kingdom (UK)	10/18

Code : 0	00312622	Date of issue/Date of revision	: 11 July 2017	
SIGMAZINC 11 C	GREY			

SECTION 9: Physical and chemical properties

Evaporation rate	Highest known value: 1.7 (ethanol) Weighted average: 0.89compared with butyl acetate
Material supports combustion.	: Yes.
Flammability (solid, gas)	: liquid
Upper/lower flammability or explosive limits	: Greatest known range: Lower: 1.3% Upper: 23% (tetraethyl silicate)
Vapour pressure	 Highest known value: 5.7 kPa (43 mm Hg) (at 20°C) (ethanol). Weighted average: 1.41 kPa (10.58 mm Hg) (at 20°C)
Vapour density	: Highest known value: 7.22 (Air = 1) (tetraethyl silicate). Weighted average: 3.65 (Air = 1)
Relative density	: 2.13
Solubility(ies)	Insoluble in the following materials: cold water.
Partition coefficient: n-octanol/ water	Not applicable.
Auto-ignition temperature	: Lowest known value: 432°C (809.6°F) (xylene).
Decomposition temperature	: Stable under recommended storage and handling conditions (see Section 7).
Viscosity	: Kinematic (40°C): >0.21 cm ² /s
Explosive properties	Product does not present an explosion hazard.
Oxidising properties	Product does not present an oxidizing hazard.

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 decomposition products	:	Evolves hydrogen on contact with water. Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides metal oxide/oxides

Code	: 00312622	Date of issue/Date of revision	: 11 J
SIGMAZI	NC 11 GREY		

: Not available.

11 July 2017

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	-
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	-
ethanol	LC50 Inhalation Vapour	Rat	124700 mg/m ³	4 hours
	LD50 Oral	Rat	7 g/kg	-
1-nitropropane	LD50 Oral	Rat	0.455 g/kg	-
tetraethyl silicate	LC50 Inhalation Dusts and mists	Rat	10 to 16 mg/l	4 hours
	LD50 Dermal	Rabbit	5.878 g/kg	-
	LD50 Oral	Rat	6270 mg/kg	-
2-dimethylaminoethanol	LC50 Inhalation Gas.	Rat	1641 ppm	4 hours
-	LC50 Inhalation Vapour	Rat	6100 mg/m ³	4 hours
	LD50 Dermal	Rabbit	1.37 g/kg	-
	LD50 Oral	Rat	1.803 g/kg	-

Conclusion/Summary

Acute toxicity estimates

Route	ATE value
Oral	22713.7 mg/kg
Dermal	6575.6 mg/kg
Inhalation (gases)	354819.7 ppm
Inhalation (vapours)	53.12 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
Conclusion/Summary	: Not available.				
Sensitisation					
Conclusion/Summary	: Not available.				
<u>Mutagenicity</u>					
Conclusion/Summary	: Not available.				
Carcinogenicity					
Conclusion/Summary	: Not available.				
Reproductive toxicity					
Conclusion/Summary	: Not available.				
Teratogenicity					
Conclusion/Summary	: Not available.				
Specific target organ toxicity	<u>y (single exposure)</u>				

Code	: 00312622	Date of issue/Date of revision	: 11 July 2017
SIGMAZINC 1	11 GREY		

SECTION 11: Toxicological information

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 3	Not applicable.	Respiratory tract irritation
tetraethyl silicate	Category 3	Not applicable.	Respiratory tract irritation
2-dimethylaminoethanol	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 2		central nervous system (CNS), kidneys and liver
ethylbenzene	Category 2	Not determined	hearing organs

Aspiration hazard

Product/i	ngredient name	Result	
xylene ethylbenzene		ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1	
Information on likely routes of exposure	: Not available.		
Potential acute health effect	<u>s</u>		
Inhalation	: No known significant effects or c	ritical hazards.	
Ingestion	: No known significant effects or c	ritical hazards.	
Skin contact	: Causes skin irritation. Defatting	to the skin.	
Eye contact	: Causes serious eye irritation.		
Symptoms related to the phy	vsical, chemical and toxicological	<u>characteristics</u>	
Inhalation	: No specific data.		
Ingestion	: No specific data.		
Skin contact	: Adverse symptoms may include irritation redness dryness cracking		
Eye contact	: Adverse symptoms may include pain or irritation watering redness	the following:	
Delayed and immediate effe	cts as well as chronic effects from	<u>short and long-term exposure</u>	
Short term exposure Potential immediate effects	: Not available.		
Potential delayed effects	: Not available.		
Long term exposure Potential immediate effects	: Not available.		
Potential delayed effects	: Not available.		
Potential chronic health effe			
English (GB)	United Kingo	Iom (UK) 13.	8/18

Code	: 00312622	Date of issue/Date of revision	: 11 July 2017	
SIGMAZINC 11 GREY				

SECTION 11: Toxicological information

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.
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	
ethylbenzene	Acute LC50 150 to 200 mg/l Fresh water	Fish - Lepomis macrochirus - Young of the year	96 hours	
ethanol zinc oxide	Acute EC50 7640 mg/l Fresh water Acute EC50 0.17 mg/l	Daphnia - Daphnia magna Algae	48 hours 72 hours	
	Acute EC50 0.481 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours	
	Chronic NOEC 0.017 mg/l Fresh water	Algae	72 hours	

Conclusion/Summary

: Not available.

12.2 Persistence and degradability

Conclusion/Summary	: Not available.
--------------------	------------------

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

12.3 Bioaccumulative potential

English (GB)	United Kingdom (UK)	14/18
• • • •	c ()	

Code	: 00312622	Date of iss
SIGMAZIN	IC 11 GREY	

sue/Date of revision : 11 Ju

: 11 July 2017

SECTION 12: Ecological information

Product/ingredient name	LogPow	BCF	Potential
xylene	3.16	7.4 to 18.5	low
ethylbenzene	3.15	79.43	low
ethanol	-0.31	-	low
1-nitropropane	0.87	-	low
2-dimethylaminoethanol	-0.55	-	low

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

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

English (GB)	United Kingdom (UK)	15/18

Code	1	00312622
SIGMAZINC	11	GREY

Date of issue/Date of revision

: 11 July 2017

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
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(Zinc powder - zinc dust (stabilized), zinc oxide)	Not applicable.

Additional information

ADR/RID	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.	
Tunnel code	: (D/E)	
ADN	: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.	
IMDG	: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.	
ΙΑΤΑ	: The environmentally hazardous substance mark may appear if required by other transportation regulations.	
14.6 Special pred user	cautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.	
14.7 Transport ir according to Anr Marpol and the II	nex II of	

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**

Code	: 00312622	Date of issue/Date of revision	: 11 July 2017
SIGMAZINC	11 GREY		

SECTION 15: Regulatory information

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category	
P5c: Flammable liquids 2 and 3 not falling under P5a o	r P5b
E1: Hazardous to the aquatic environment - Acute 1 or	Chronic 1
6: Flammable (R10)	
9i: Very toxic for the environment	

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

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 Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
STOT RE 2, H373	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
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.
Full tout of close if entire [OLD/	

Full text of classifications [CLP/GHS]

SIGMAZINC	11 GREY		-
Code	: 00312622	Date of issue/Date of revision	: 11 July 2017

SECTION 16: Other information

Acute Tox. 3, H331	ACUTE TOXICITY (inhalation) - Category 3
Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation) - Category 4
Aquatic Acute 1, H400	ACUTE AQUATIC HAZARD - Category 1
Aquatic Chronic 1, H410	LONG-TERM AQUATIC HAZARD - Category 1
Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1
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. 1B, H314	SKIN CORROSION/IRRITATION - Category 1B
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
STOT RE 2, H373	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE
	- Category 2
STOT SE 3, H335	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE
	(Respiratory tract irritation) - Category 3

Н	isto	ry

Date of issue/ Date of revision	: 11 July 2017
Date of previous issue	: 10 July 2017
Prepared by	: EHS
Version	: 13.05

Disclaimer

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