SAFETY DATA SHEET

ORMEON ST

SECTION 1: INDENTIFICATION OF SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifier

Product name	: Conductive polyaniline based primer for steel
Product code	: ORMECON ST
Product description	: Paint.
Product type	: Liquid
Other means of Identification	: Not available.

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

Use in coatings - Industrial use
Use in coatings - Professional use

1.3 Details of the supplier of the safety data sheet

Aadarsh Innovations
E 501 Prakrtii Housing Society
Balewadi, Pune, 411045, Maharashtra, India

Phone: +91 9028004416
Email: aadarsh.innovations@gmail.com

1.4 Emergency telephone number

+91 9028004416

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. 2, H225

Skin Irrit. 2, H315

Eye Irrit. 2, H319

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended. See Section 11 for more detailed information on health effects and symptoms.

2.2. Label elements

Hazard pictograms

Signal word Danger.

Hazard statements :

: H225 - Highly flammable liquid and vapour.
: H319 - Causes serious eye irritation.
: H315 - Causes skin irritation.

Precautionary statements

General Not applicable.

Prevention

P280 - Wear protective gloves. Wear eye or face protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical attention.

Storage

P403 - Store in a well-ventilated place.
P235 - Keep cool.

Disposal P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients 2-butoxyethanol

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 requirements

Containers to be fitted with child-resistant fastenings	Not applicable
Tactile warning of danger	Not applicable

2.3. Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	None known.

SECTION 3: Composition/information on ingredients

Mixtures : Mixture

Product/ingredient name	Identifiers	Weight %	Regulation (EC) No. 1272/2008 [CLP]	Type
Epoxy polymer	REACH # 01-2119456619-26 EC :500-033-5 CAS No: 25068-38-6	~3	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Aquatic Chronic 2 (H411)	[1] [2]
Acrylic copolymer	CAS -97-86-9	~10	Flam. Liq .3; H226 Skin Lmt 2; H315 Skin Sens 1B; H317 STOT SE 3(inh); H335	[1] [2]
Polyaniline powder	CAS: 25233-30-1	<5		
Titanium dioxide	CAS : 13463-67-7 EC No: 236-675-5 EC Index:022-006-00-2 REACH: 01-2119489379-17	<3	Carc. 2, H351	
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≤10	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1] [2]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≤12	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
ethylbenzene	REACH #: 01-2119489370-35	≤20	Flam. Liq. 2, H225 Acute Tox. 4, H332	[1] [2]

	EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4		STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304	
n-butanol	REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	<5	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	[1] [2]
Phosphoric acid	EC: 231-633-2 CAS: 7664-38-2 Index: 015-011-00-6	<2	Acute Tox.4, H302, H332 Skin Irrit.1B, H314 Eye Dam. 1, H318 STOT SE : N/A	
1 propanol	REACH # 01-2119486761-29 EC: 200-746-9 CAS : 71-23-8 Index: 603-003-00-0	<30	Flam. Liq. 2, H225 Eye Dam. 1, H318 STOT SE 3, H336	[1] [2]
Silica	CAS No: 112945-52-5 EC No: 262-373-8 Index : Not assigned.	<1	Flam. Liq.: Not classified. Acute Tox.:Not classified. Acute Tox. :Not classified. Skin Irrit. :Not classified. Eye Irrit. :Not classified.	
Talc	REACH #: 01-2119484630-38 EC: 238-877-9 CAS: 14807-96-6 Index: Not classified	<5	Flam. Liq.: Not classified. Acute Tox.:Not classified. Acute Tox. :Not classified. Skin Irrit. :Not classified. Eye Irrit. :Not classified.	
			See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

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.

SECTION 4 : FIRST AID MEASURES

4.1 Description of first aid measures

General	**:** In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
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

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. 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 nonallergic contact dermatitis and absorption through the skin. Ingestion may cause nausea, diarrhea and vomiting.

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

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.

See toxicological information (Section 11)

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Recommended: alcohol-resistant foam, CO_2, powders, water spray.

Unsuitable extinguishing : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Hazardous combustion products : : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

5.3 Advice for firefighters

Special protective actions for fire-fighters Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

Special protective equipment for fire-fighters Appropriate breathing apparatus may be required.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.

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-em rgency personnel".
6.2 Environmental precautions	**:** Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.
6.3 Methods and material for containment and cleaning up	: 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 (see Section 13). Preferably clean with a detergent. Avoid using solvents.
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

Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.

In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws. Do not allow to enter drains or watercourses.

Information on fire and explosion protection

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

Recommendations **:** Not available

Industrial sector specific Solutions : Not available

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

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), 1/2020). 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), 1/2020). 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.
ethylbenzene	**EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.** STEL: 552 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours. TWA: 441 mg/m³ 8 hours.
Titanium dioxide	STEL : Not specified (15 minutes) Absorbed through skin : No, not absorbed through skin TWA: 10 ppm 8 hours, total inhalable. TWA: 4 mg/m³ 8 hours, respirable.
Silica	STEL: Not established TWA: 2 mg/m³ 8 hours. Respirable dust TWA: 6 mg/m³ 8 hours. Inhalable dust
Talk	STEL: No specific STEL TWA: 2 mg/m³ 8 hours.
n- butanol	STEL: 154 mg/m³ 15 minutes. STEL: 50 ppm 15 minutes. TWA : Not set
1- propanol	STEL: 625 mg/m³ 15 minutes. STEL: 250 ppm 15 minutes. TWA: 200 ppm 8 hours. TWA: 500 mg/m³ 8 hours.
Phosphoric acid	STEL: 2 mg/m³ 15 minutes. TWA: 1 mg/m³ 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/DMELs

Product / Ingredient name	Exposure	Value	Population	Effects
xylene	Short term Inhalation	289 mg/m³	Workers	Systemic
	Short term Inhalation	289 mg/m³	Workers	Local
	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	Long term Inhalation	77 mg/m³	Workers	Systemic
	Long term Dermal	108 mg/kg bw/day	General population [Consumers]	Systemic
	Long term Inhalation	14.8 mg/m³	General population [Consumers]	Systemic
	Long term Oral	1.6 mg/kg bw/day	General population	Systemic
1-methoxy-2-propanol	Short term Inhalation	553.5 mg/ m³	Workers	Local
	Long term Dermal	50.6 mg/ kg bw/day	Workers	Systemic
	Long term Inhalation	369 mg/m³	Workers	Systemic
	Long term Dermal	18.1 mg/ kg bw/day	General population [Consumers]	Systemic
	Long term Inhalation	43.9 mg/m³	General population [Consumers]	Systemic
	Long term Oral	3.3 mg/kg bw/day	General population [Consumers]	Systemic
	Long term Oral	33 mg/kg bw/day	General population	Systemic
	Long term Inhalation	43.9 mg/m³	General population	Systemic
	Long term Dermal	78 mg/kg bw/day	General population	Systemic
	Long term Dermal	183 mg/kg bw/day	Workers	Systemic

	Long term Inhalation	369 mg/m^3	Workers	Systemic
	Short term Inhalation	553.5 mg/ m^3	Workers	Systemic
ethylbenzene	Short term Inhalation	293 mg/m^3	Workers	Local
	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	Long term Inhalation	77 mg/m^3	Workers	Systemic
	Long term Inhalation	15 mg/m^3	General population [Consumers]	Systemic
	Long term Oral	1.6 mg/kg bw/day	General population [Consumers]	Systemic
	Long term Oral	1.6 mg/kg bw/day	General population	Systemic
	Long term Inhalation	442 mg/m^3	Workers	Local
	Short term Inhalation	884 mg/m^3	Workers	Systemic
butanol	Long term Inhalation	310 mg/m^3	Workers	Local
	Long term Inhalation	55 mg/m^3	General population	Local
	Long term Oral	3125 mg/ kg bw/day	General population	Systemic
1-propanol	human, inhalatory	1.723 mg/m^3	Workers	Local
	Long term Inhalation	268 mg/m^3	Workers	Systemic
	Short term Inhalation	1.723 mg/m^3	Workers	Systemic
	Long term Dermal	136 mg/kg bw/ day	Workers	Systemic
Titanium dioxide	Inhalation	10 mg/m^3	Workers	Local
	Dermal	0.94 mg/kg bw/ day	Workers	Systemic
	Inhalation	0.58 mg/m^3	General population	Systemic
	Dermal	0.34 mg/kg bw/ day	General population	Systemic

	Oral	0.34-0.7 mg/kg bw/ day	General population	Systemic
Silica	Long-term inhalation	4 mg/m³	Workers	
		0.3 mg/m³	Workers	
Talc	Long term inhalation	2.16 mg/m³	Workers	Systemic
	Long term inhalation	3.6 mg/m³	Wokers	Local
	Long term dermal	3.2 mg/Kg bw/day	Workers	Systemic
	Long term dermal	4.54 mg/m³	Workers	Local
	Long term inhalation	1.08 mg/m³	General population	Systemic
	Long term inhalation	1.8 mg/m³	General population	Local
	Long term dermal	21.6 mg/Kg bw/day	General population	Systemic
	Long term dermal	2.27 mg/m³	General population	Local
	Oral, long term	160 mg/Kg bw/day	General population	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
xylene	Fresh water	0.327 mg/l	-
	Marine	0.327 mg/l	-
	Sewage Treatment Plant	6.58 mg/l	-
	Fresh water sediment	12.46 mg/kg dwt	-
	Marine water sediment	12.46 mg/kg dwt	-
	Soil	2.31 mg/kg dwt	-
1-methoxy-2-propanol	Fresh water	10 mg/l	-
	Marine	1 mg/l	-
	Sewage Treatment Plant	100 mg/l	-
	Fresh water sediment	52.3 mg/kg dwt	-
	Marine water sediment	5.2 mg/kg dwt	-

	Soil	5.49 mg/kg dwt	-
ethylbenzene	Fresh water	0.1 mg/l	-
	Marine	0.01 mg/l	-
	Sewage Treatment Plant	9.6 mg/l	-
	Fresh water sediment	13.7 mg/kg dwt	-
	Soil	2.68 mg/kg dwt	-
	Secondary Poisoning	20 mg/kg	-
butanol	Fresh water	0.082 mg/l	-
	Marine	0.082 mg/l	-
	Sewage Treatment Plant	2476 mg/l	-
	Fresh water sediment	0.178 mg/kg	-
	Marine water sediment	0.0178 mg/kg	-
	Soil	0.015 mg/kg	-
1 -propanol	Freshwater	10 mg/l	-
	Marine water	1 mg/l	-
	Sewage treatment plant	96 mg/l	-
	Freshwater sediment	22,8 mg/kg	-
	Marine sediment	2,28 mg/kg	-
	Soil	2,2 mg/kg	-
Titanium dioxide	Waste water treatment plant	100 mg/L	
	Aquatic organisms (general)	2.76 mg/L	
	Soil organisms (micorbes, plants and invertebrates) NOEC/EC10/LC10	>1000mg/Kg dry weight	
Silica	Water	Not derived / Not applicable	
	Soil	Not derived / Not applicable	
	Aquatic organisms (general)	0.03 mg/L	

	Sediments	Not derived / Not applicable	
Talc	Freshwater	598 mg/L	
	Marine water	141.3 mg/L	
	Sewage treatment plant	Not specified	
	Freshwater sediment	31.33 mg/Kg	
	Marine sediment	3.13 mg/Kg	
	Soil	Not specified	

8.2 Exposure controls

Appropriate engineering controls Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

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 **:** Safety eyewear complying to EN 166 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Gloves There is no one glove material or combination of materials that will give unlimited
resistance to any individual or combination of chemicals.
The breakthrough time must be greater than the end use time of the product.
The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
Gloves should be replaced regularly and if there is any sign of damage to the

	glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred. If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387(as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoal filter. Wear suitable gloves tested to EN374. Recommended, gloves(breakthrough time) > 8 hours: Saranex, Viton® , 4H, Teflon Not recommended, gloves(breakthrough time) < 1 hour: PVC May be used, gloves(breakthrough time) 4 - 8 hours: PE, nitrile rubber, neoprene, butyl rubber, polyvinyl alcohol (PVA) For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves. 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.
Body protection	Personnel should wear antistatic clothing made of natural fibres or of high temperature-resistant synthetic fibres.
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	If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387(as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoalfilter.
Environmental exposure controls	Do not allow to enter drains or watercourses.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Physical state	Liquid.
Colour	Green
Odour	Characteristic.
Odour threshold	Not applicable.
pH	Not applicable.
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	: 116 °C, 1013 mbar
Flash point	Closed cup: 16°C
Evaporation rate	Highest known value: 1.7 (ethanol) Weighted average: 1.03 compared with butyl acetate
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	0.8 - 23%
Vapour pressure	approx 9 mbar, 20 °C
Vapour density	Highest known value: 7.22 (Air = 1) (tetraethyl silicate). Weighted average: 3.18 (Air = 1)
Density	0.94 g/mL, 20°C
Solubility(ies)	Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water	Not available.
Auto-ignition temperature	Lowest known value: 200°C (392°F) n butanol
Decomposition temperature	Not available.
Viscosity	> 90 s, 23 °C
Explosive properties	Not available.
Oxidising properties	Not available.

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	Stable under recommended storage and handling conditions (see Section 7).
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.
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	Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

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. 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 nonallergic contact dermatitis and absorption through the skin. Ingestion may cause nausea, diarrhea and vomiting.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LD50 Oral	Rat - Male, Female	1300 mg/kg	-
	LC50 Inhalation Vapour	Rat	20 mg/l	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
	TDLo Dermal	Rabbit	4300 mg/kg	-
1-methoxy-2-propanol	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	6600 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat - Male	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
Butanol	LC50 Inhalation Vapour	Rat	24000 mg/m^3	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	
	LD50 Oral	Rat	790 mg/kg	
1 -propanol	LD50 Oral	Rat	1870 mg/kg	
	LD50 Dermal	Rabbit	5040 mg/kg	
Silica	LD50 Dermal	Rabbit	2000 mg/Kg	
	LD50 Oral	Rat	5000 mg/Kg	
Titanium dioxide	LD50 Oral	Rat	>2000-10000 mg/Kg	
	LD50 Dermal	Rabbit	>10,000 mg/Kg	
	Inhalation	Rat	3.4-5.1 mg/L	4 hours
Talc	LD50 Oral	Rat	>5000 mg/Kg	
	LD50 Dermal	Rabbit	No data (not toxic)	
	Inhalation	Rat	>5.8 mg/L	4hours

Acute toxicity estimates

Route	ATE value
Oral	5000 mg/kg
Dermal	6656.58 mg/kg
Inhalation (vapours)	53.21 mg/l

Irritation/Corrosion

Product / ingredient name	Result	Species	Score	Exposure	Observation
xylene	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
Butanol	Skin - Mild irritant	Rabbit -	-	500 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
1-propanol	Eyes - Moderate irritant	Rabbit		24 hours 20 mg	
	Skin - Mild irritant	Human		47 hours 100 %	
	Skin - Mild irritant	Human		24 hours 100 %	
	Skin - Mild irritant	Rabbit		500 mg	

Sensitisation

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

Mutagenicity

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproductive toxicity

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 3	Not applicable.	Respiratory tract irritation
1-methoxy-2-propanol	Category 3	Not applicable.	Narcotic effects
butanol	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	Not determined	hearing organs

Aspiration hazard

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

Other information **:** None identified.

SECTION 12 : ECOLOGICAL INFORMATION

12.1 Toxicity

There are no data available on the mixture itself. Do not allow to enter drains or watercourses.The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as hazardous to the environment.

Product / ingredient name	Result	Species	Exposure
ethylbenzene	Acute EC50 7.2 mg/l	Algae	48 hours
	Acute EC50 2.93 mg/l	Daphnia	48 hours
	Acute LC50 4.2 mg/l	Fish	96 hours
butanol	Acute EC50 1983 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1730000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
1 propanol	LC50 4555 mg/l	Fish	96 hours
	EC50 3644 mg/l	Aquatic invertebrates	48 hours

	ErC50 9170 mg/l	Algae	48 hours

No known significant effects or critical hazards.

12.2 Persistence and degradability

Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene	-	-	Readily
ethylbenzene	-	-	Readily
N-Butanol	-	-	Readily
1 Propanol	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
xylene	3.12	8.1 to 25.9	low
1-methoxy-2-propanol	<1	-	low
ethylbenzene	3.6	-	low
n-butanol	1	-	low
1 -propanol	0.2	-	low

12.4 Mobility in soil	
Soil/water partition coefficient (K_{OC})	: Not available.
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 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.

Disposal considerations : Do not allow to enter drains or watercourses.
Dispose of according to all federal, state and local applicable regulations.
If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.
For further information, contact your local waste authority.

European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste code	Waste designation
08 01 11*	Waste paint and varnish containing organic solvents or other dangerous 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.

Disposal considerations : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.

Type of Packaging	European waste catalogue (EWC)	
CEPE Paint Guidelines	15 01 10*	packaging containing residues of or contaminated by hazardous substances

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used

containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. SECTION 14: Transport information

SECTION 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	II	II	II	II
14.5 Environmental hazards	No.	No.	No.	No.

Additional information

ADR/RID : **Hazard identification number** 33

Special provisions 640 (C)

Tunnel code (D/E)

ADN : **Special provisions** 640 (C)

IMDG : **Emergency schedules** F-E, S-E

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 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	3	3	3	3

hazard class(es)				
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	No.	No.	No.	No.

Additional information

ADR/RID : **Hazard identification number** 33

Special provisions 640 (C)

Tunnel code (D/E)

ADN : **Special provisions** 640 (C)

IMDG : **Emergency schedules** F-E, S-E

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 on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	**:** Not applicable.

Other EU regulations

VOC	**:** The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.
VOC for Ready-for-Use mixture	**:** Not available.
Europe inventory	**:** Not determined.
Ozone depleting substances (1005/2009/EU)	Not listed.
Prior Informed Consent (PIC) (649/2012/EU)	Not listed.
Seveso Directive	This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

National regulations

Industrial use	**:** The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

International regulations

Chemical Weapon Convention List Schedules I, II & III chemicals	Not listed.

Montreal Protocol (Annexes A, B, C, E)	Not listed.
Stockholm Convention on Persistent Organic Pollutants	Not listed.
Rotterdam Convention on Prior Informed Consent (PIC)	Not listed.
UNECE Aarhus Protocol on POPs and Heavy Metals	Not listed.

15.2 Chemical safety Assessment : Not applicable.

SECTION 16 : OTHER INFORMATIONS

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]

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 2, H225	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.

Full text of classifications [CLP/GHS]

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
Asp. Tox. 1, H304	ASPIRATION HAZARD - 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 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
STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3
STOT SE 3, H335	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3
STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3

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Notice to reader

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