ULTRIMAX SGX

1. PRODUCT AND COMPANY IDENTIFICATION

1.01 Product Code	Ultrimax SG
1.02 Product Name	Ultrimax SG
1.03 Synonyms	(General colours)
1.04 Intended Use	An air-drying, liquid, solvent-borne, paint for industrial use. For metal finishing, apply by manual spray. The product may also be applied as a professional coating for structural steelwork in buildings, where it is normally applied by brush and roller unless spray mist can be adequately controlled.
1.05 Manufacturer/Supplier	Ultrimax Coatings Ltd
1.06 Address	Shaw Lane Industrial Estate, Ogden Road, Doncaster, DN2 4SE
1.07 Contact	www.ultrimaxstore.com
1.08 Phone Number	01302 856666
1.09 Email	sales@ultrimaxcoatings.co.uk
1.10 Emergency Phone Number	01302 856666

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
Classification (EC 1272/2008)
Physical hazards Flam. Liq. 3 - H226
Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 STOT RE 2 - H373
Environmental hazards Not Classified

2.2. Label elements

Signal word Warning

Hazard statements
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
EUH208 Contains FATTY ACIDS C6 -19-BRANCHED, COBALT (2+) SALTS, BUTANONE OXIME. May produce an allergic reaction.

Precautionary statements
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe vapour/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P284 [In case of inadequate ventilation] wear respiratory protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Contains XYLENE, HYDROCARBONS C9 AROMATICS

2. HAZARDS IDENTIFICATION

Supplementary precautionary statements

P201 Obtain special instructions before use.
P240 Ground/ bond container and receiving equipment.
P241 Use explosion-proof electrical equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing vapour/ spray.
P263 Avoid contact during pregnancy/ while nursing.
P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P302+P352 IF ON SKIN: Wash with plenty of water.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313 IF exposed or concerned: Get medical advice/ attention.
P312 Call a POISON CENTER/ doctor if you feel unwell.
P314 Get medical advice/ attention if you feel unwell.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/ attention.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
P391 Collect spillage.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.

Labelling notes For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. COMPOSITION/INFORMATION ON INGREDIENTS

XYLENE 10-25%

CAS number: 1330-20-7 EC number: 215-535-7 REACH registration number: 01-2119488216-32-0000

Classification

Flam. Liq. 3 - H226 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319

STOT SE 3 - H335 STOT RE 2 - H373 Asp. Tox. 1 - H304

HYDROCARBONS C9 AROMATICS 1-5%

CAS number: 64742-95-6 EC number: 918-668-5 REACH registration number: 01-2119455851-35-XXXX

Classification

Flam. Liq. 3 - H226 STOT SE 3 - H335, H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411

ETHYLBENZENE 1-5%

CAS number: 100-41-4 EC number: 202-849-4 REACH registration number: 01-2119489370-35-0000

Classification

Flam. Liq. 2 - H225 Acute Tox. 4 - H332 STOT RE 2 - H373 Asp. Tox. 1 - H304

2-METHOXY-1-METHYLETHYL ACETATE 0.1 - <1%

CAS number: 108-65-6 EC number: 203-603-9 REACH registration number: 01-2119475791-29-0000

Classification

Flam. Liq. 3 - H226

2-ETHYL-HEXANOIC ACID, ZIRCONIUM SALT 0.1 - <1%

CAS number: 22464-99-9 EC number: 245-018-1 REACH registration number: 01-2119979088-21-0000

Classification

Repr. 2 - H361

FATTY ACIDS C6 -19-BRANCHED, COBALT (2+) SALTS 0.1 - <1%

CAS number: 68409-81-4 EC number: 270-066-5 REACH registration number: 01-2119979088-21-0000

Classification

Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Repr. 2 - H361f Aquatic Chronic 2 - H411

BUTANONE OXIME 0.1 - <1%

CAS number: 96-29-7 EC number: 202-496-6 REACH registration number: 01-2119539477-28-0000

Classification

Acute Tox. 4 - H312 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Carc. 2 - H351

TRIZINC BIS(ORTHOPHOSPHATE) 90% 1-5%

CAS number: 7779-90-0 M factor (Acute) = 1 EC number: 231-944-3 M factor (Chronic) = 1

This zinc phosphate is a mixture of zinc phosphate (90%) and non-hazardous additive (10%). Due to the formulation and appropriate test data,commissioned by its supplier, it does not meet the criteria for classification [GHS/CLP part 4.1 of the hazards to aquatic environment as defined in the GHS and CLP regulations]. This mixture must be considered as a whole entity similar to a substance on the basis of test results (OECD 201, 202, 203, 211 and according to GLP protocols)

Classification

Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

The full text for all hazard statements is displayed in Section 16.

Composition comments: The data shown are in accordance with the latest EC Directives.

Ingredient notes: Substances presenting a health or environmental hazard within the meaning of Regulation (EC) No. 1272/2008, assigned a Community workplace exposure limit, classified as PBT/vPvB or included in the Candidate List.

4. FIRST AID MEASURES

General information	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.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.
Ingestion	If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
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.

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

Inhalation	May cause irritation of the respiratory system. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.
Ingestion	Ingestion may cause nausea, diarrhoea and vomiting.
Skin contact	Xylene is harmful and irritating to skin. Prolonged or repeated contact with skin may cause soreness, irritation or dry skin due to a defatting action.
Eye contact	The liquid splashed in the eyes may cause irritation and reversible damage.

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

Notes for the doctor	Causes irritation to the skin. This irritation can result in redness and swelling of the skin. Repeated contact with the skin may cause it to become dry and cracked. Causes eye irritation. This irritation can result in redness and swelling of the eyes. May cause respiratory irritation. If inhalation occurs, signs and symptoms may include sore throat, headache, nausea, coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath and may cause transient central nervous system (CNS) depression.

5. FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media recommended: alcohol resistant foam, CO2, powders, water spray/mist

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Vapour is denser than air – flashback may be possible over considerable distances. Fire will produce dense black smoke.

Exposure to decomposition products may cause a health hazard.

Appropriate breathing apparatus may be required.

5.3. Advice for firefighters

Protective actions during firefighting

Cool closed containers exposed to fire with water.

Do not allow run-off from fire fighting to enter drains or water courses.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Exclude non-essential personnel. Exclude sources of ignition and ventilate the area.

Avoid breathing vapours.

Refer to protective measures listed in sections 7 and 8.

6.2. Environmental precautions

Environmental precautions Vapours are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks). Do not allow to enter drains or watercourses.

If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

Clean preferably with a detergent - avoid use of solvents.

6.4. Reference to other sections

Reference to other sections See Section 12 for additional ecological information.

7. HANDLING & STORAGE

7.1. Precautions for safe handling

The Manual Handling Operations Regulations may apply to the handling of containers of this product. To assist employers, the following method of calculating the weight for any pack size is given. Take the pack size volume in litres and multiply this figure by the specific gravity value given in Section 9. This will give the net weight of the coating in kilograms. Allowance will then have to be made for the immediate packaging to give an approximate gross weight. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration 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 anti-static footwear and clothing and floors should be of the conducting type.
Isolate from sources of heat, sparks and open flame.
Non-sparking tools should be used.
Avoid skin and eye contact.
Avoid the inhalation of dust, particulates and spray mist arising from the application of this mixture.
Avoid inhalation of dust from sanding.
Smoking, eating and drinking should be prohibited in application area.
For personal protection see Section 8.
Never use pressure to empty: container is not a pressure vessel.
Always keep in containers of same material as the original one.
Comply with the health and safety at work laws.
Do not allow to enter drains or water courses. Wash hands before eating and before leaving the site.
Remove contaminated clothing and protective equipment before entering eating areas. Information on fire and explosion protection.
Vapours are heavier than air and may spread along floors.
Vapours may form explosive mixtures with air. 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, preferably soaked with water, 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.

7. HANDLING & STORAGE

7.2. Conditions for safe storage, including any incompatibilities
Store in accordance with the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR). The requirements are given in the HSE Approved Code of Practice and Guidance, Storage of Dangerous Substances: DSEAR.
The principles contained in the HSE guidance note Chemical Warehousing: The Storage of Packaged Dangerous Substances, should be observed when storing this product. Notes on joint storage.
Store away from oxidising agents, from strongly alkaline and strongly acid materials. Additional information on storage conditions
Observe label precautions.
Store between 5 and 25 °C in a dry, well ventilated place away from sources of heat and direct sunlight.
Keep container tightly closed.
Keep away from sources of ignition.
No smoking.
Prevent unauthorised access.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3. Specific end use(s)
Specific end use(s) The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters
Occupational exposure limits

XYLENE
Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³
Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³
Sk

ETHYLBENZENE
Long-term exposure limit (8-hour TWA): WEL 100 ppm 441 mg/m³
Short-term exposure limit (15-minute): WEL 125 ppm 552 mg/m³
Sk

2-METHOXY-1-METHYLETHYL ACETATE
Long-term exposure limit (8-hour TWA): WEL 50 ppm 274 mg/m³
Short-term exposure limit (15-minute): WEL 100 ppm 548 mg/m³
Sk

2-ETHYL-HEXANOIC ACID, ZIRCONIUM SALT
Long-term exposure limit (8-hour TWA): WEL 5 mg/m³
as Zr
Short-term exposure limit (15-minute): WEL 10 mg/m³
as Zr

FATTY ACIDS C6 -19-BRANCHED, COBALT (2+) SALTS
Long-term exposure limit (8-hour TWA): WEL 0.1 mg/m3(Sen)
as Co

8. EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

BUTANONE OXIME
Long-term exposure limit (8-hour TWA): SUP 10 ppm
Sen

WEL = Workplace Exposure Limit Sen = Capable of causing occupational asthma. Sk = Can be absorbed through the skin.

Ingredient comments	According to EH40 - List of approved workplace exposure limits. For dust the 8 hour TWA's are:- Respirable dust 4 mg/cu.m (WEL) Total inhalable dust 10 mg/cu.m (WEL)

XYLENE (CAS: 1330-20-7)

Biological limit values	650 mmol methyl hippuric acid/mol creatinine in urine. Post shift sampling
DNEL	Industry - Inhalation; Short term systemic effects: 289 mg/m³ Industry - Inhalation; Long term systemic effects: 77 mg/m³ Industry - Inhalation; Short term local effects: 289 mg/m³ Industry - Inhalation; Long term local effects: 77 mg/m³ Industry - Dermal; Short term systemic effects: 174 mg/m³ Consumer - Inhalation; Long term systemic effects: 14.8 mg/m³ Consumer - Inhalation; Short term local effects: 174 mg/m³ Consumer - Inhalation; Short term systemic effects: 174 mg/m³ Consumer - Dermal; Long term systemic effects: 108 mg/kg/day Consumer - Oral; Long term systemic effects: 1.6 mg/kg/day
PNEC	Fresh water; 0.327 mg/l Marine water; 0.327 mg/l Intermittent release; 0.327 mg/l Sediment (Freshwater); 12.46 mg/kg Sediment (Marinewater); 12.46 mg/kg Soil; 2.31 mg/kg STP; 6.58 mg/l

HYDROCARBONS C9 AROMATICS (CAS: 64742-95-6)

DNEL	Industry - Inhalation; Long term systemic effects: 150 mg/m³ Industry - Dermal; Long term systemic effects: 25 mg/kg/day Consumer - Inhalation; Long term systemic effects: 32 mg/m³ Consumer - Dermal; Long term systemic effects: 11 mg/kg/day Consumer - Oral; Long term systemic effects: 11 mg/kg/day
PNEC	No data available.

ETHYLBENZENE (CAS: 100-41-4)

DNEL	Industry - Inhalation; Long term : 77 mg/m³ Industry - Inhalation; Short term : 293 mg/m³ Industry - Dermal; Long term : 180 mg/kg/day Consumer - Inhalation; Long term : 15 mg/m³ Consumer - Oral; Long term : 1.6 mg/kg/day
PNEC	Fresh water; 0.635 mg/l Marine water; 0.0635 mg/l Intermittent release; 6.35 mg/l STP; 100 mg/l Sediment (Freshwater); 3.29 mg/kg Sediment (Marinewater); 0.329 mg/kg Soil; 0.29 mg/kg

8. EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

2-ETHYL-HEXANOIC ACID, ZIRCONIUM SALT (CAS: 22464-99-9)

DNEL
Industry - Inhalation; Long term systemic effects: 5 mg/m³
Industry - Dermal; Long term systemic effects: 15.75 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 2.5 mg/m³
Consumer - Dermal; Long term systemic effects: 7.9 mg/kg/day
Consumer - Oral; Long term systemic effects: 7.9 mg/kg/day

PNEC
Fresh water; 0.36 mg/l
Marine water; 0.036 mg/l
Intermittent release; 0.493 mg/l
STP; 71.7 mg/l
Sediment (Freshwater); 6.37 mg/kg
Sediment (Marinewater); 0.637 mg/kg
Soil; 1.06 mg/kg

FATTY ACIDS C6 -19-BRANCHED, COBALT (2+) SALTS (CAS: 68409-81-4)

DNEL
No data available.

PNEC
No data available.

BUTANONE OXIME (CAS: 96-29-7)

DNEL
Industry - Inhalation; Long term systemic effects: 9 mg/m³
Industry - Inhalation; Long term local effects: 3.3
Industry - Dermal; Long term systemic effects: 1.3 mg/kg/day
Industry - Dermal; Short term systemic effects: 2.5 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 2.7 mg/m³
Consumer - Inhalation; Long term local effects: 2 mg/m³
Consumer - Dermal; Long term systemic effects: 0.78 mg/kg/day
Consumer - Dermal; Short term systemic effects: 1.5

PNEC
Fresh water; 0.256 mg/l
Intermittent release; 0.118 mg/l
STP; 177 mg/l

TRIZINC BIS (ORTHOPHOSPHATE) 90% (CAS: 7779-90-0)

DNEL
Workers - Inhalation; Long term systemic effects: 5 mg/m³
Workers - Dermal; Long term systemic effects: 83 mg/kg bw/day
General population - Inhalation; Long term systemic effects: 2.5 mg/m³
General population - Dermal; Long term systemic effects: 83 mg/m³
General population - Oral; Long term systemic effects: 0.83 mg/m³

PNEC
PNECs for zinc:
Fresh water; 20.6 µg/L
Marine water; 6.1 µg/L
STP; 100 mg/kg, mg/kg dw
Sediment (Freshwater); 117.8 mg/kg dw
Sediment (Marinewater); 56.5 mg/kg dw
Soil; 35.6 mg/kg dw

8. EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

8.2. Exposure controls
Protective equipment

Safe use of mixture	This Safety Data Sheet should be read in conjunction with the Safe Use of Mixture (SUMI) report referred to in Section 1. The SUMI provides information collated from exposure scenarios of substances relevant to this product and is provided as part of our obligations under REACH Regulations.
Two-pack product protection	Not applicable
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 solvent vapour below the OEL, suitable respiratory protection must be worn. Dry sanding, flame cutting and/or welding of the dry paint film may give rise to dust and/or hazardous fumes. Wet sanding should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.
Personal protection	Requirements for personal protection can only be determined by performing a risk assessment on a case-by-case basis prior to use. This risk assessment should be reviewed regularly.
Eye/face protection	Use safety eyewear, manufactured/tested to EN 166, and designed to protect against splash of liquids.
Hand protection	Use chemical resistant gloves classified under "Standard EN374: Protective gloves against chemicals and micro-organisms" made from Viton or PVA barrier material. 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 and 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, they should however not be applied once exposure has occurred.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact. Personnel should wear anti-static clothing made of natural fibre or of high temperature resistant synthetic fibre.
Hygiene measures	Provide eyewash station. Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Respiratory protection

Selection of any respiratory protective equipment should ensure that it is adequate to reduce exposure to protect the worker's health and is suitable for the wearer, task and environment, including consideration of the facial features of the wearer.

Refer to the Environmental Protection Act and the Control of Pollution Act. Do not allow to enter drains or water courses.

* Spraying should be undertaken outdoor or in a vented booth. As a minimum, workers should wear a full face respirator to EN140, fitted with a filter suitable for both particulates and vapours, to EN14387, with an assigned protection factor 20 (e.g. A2/P3). A powered full face respirator with combined filter A2/P3 (APF 40) or compressed air breathing apparatus should be worn if used continuously more than 1 hour. Respirators must be worn by anyone in the booth or room during spraying, gun cleaning (spray-to-dry) and throughout the clearance time, until such time as the particulates and solvent vapour concentration have fallen below the appropriate occupational exposure limits.
* Brush or roller applications should be carried out outdoor or in good ventilation areas with 10 to 15 air changes per hour or more. As a minimum, a half face mask respirator with combined filter A2/P3 (APF 20) should be worn. A powered full face respirator with combined filter A2/P3 (APF 40) should be used, if used for more than 1 hour continuously as half face powered respirator are not recommended.
* For other operations: If workers could be exposed to concentration above the exposure limit or where ventilation is poor, they must use a respirator to EN 140, fitted with a filter suitable for both particulates and vapours, to EN 14387, with an assigned protection factor of at least 10 (e.g. A2/P3).
* Enclosed spaces with little or no ventilation: compressed air breathing apparatus should always be worn.

Fit testing and regular servicing is recommended for all respiratory protective equipment. The use of HSE website is strongly recommended in selecting the most appropriate RPE http://www.healthyworkinglives.com/rpe-selector

Environmental exposure controls

Refer to the Environmental Protection Act and the Control of Pollution Act. Do not allow to enter drains or water courses.

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	Viscous liquid.
Colour	Various
Odour	Aromatic hydrocarbons
Odour threshold	Not determined.
pH	Not applicable. The product is a non-aqueous mixture.
Melting point	-24°C
Initial boiling point and range	137 - 145°C @ 1013 hPa
Flash point	23 - 32°C SCC (Setaflash closed cup).
Evaporation rate	Not determined.
Flammability (solid, gas)	Material is not a solid or gas
Upper/lower flammability or Explosive limits	Lower flammable/explosive limit: 1 % Upper flammable/explosive limit: 9 %
Vapour pressure	0.67 kPa @ 20°C
Vapour density	Heavier than air
Relative density	1.35 - 1.45 @ 20°C
Solubility(ies)	Immiscible with water. Soluble in the following materials: Aromatic solvents.
Partition coefficient	Not determined. See Section 12 for partition coefficient data on individual components
Auto-ignition temperature	465 - 525°C
Decomposition Temperature	Not determined.
Viscosity	400 - 450 mPa·s @ 20°C Rotothinner
Explosive properties	The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.
Oxidising properties	The product is not expected to be oxidising.

9.2. Other information

Volatile organic compound	This product contains a maximum VOC content of 440 - 460 g/l. This product contains a maximum VOC content of 31 - 33 g/100 g.

10. STABILITY & REACTIVITY

10.1. Reactivity

Reactivity	Stable under recommended storage and handling conditions (see section 7). When exposed to high temperatures may produce hazardous decomposition products.

10.2. Chemical stability

Stability	Stable under recommended storage and handling conditions (see section 7).

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Keep away from oxidising agents, strongly alkaline and strongly acid materials

10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames, static electricity and other sources of ignition. When exposed to high temperatures may produce hazardous decomposition products.

10.5. Incompatible materials

Materials to avoid	Keep away from oxidising agents, strongly alkaline and strongly acid materials

10.6. Hazardous decomposition products

Hazardous decomposition products	such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity - dermal	
ATE dermal (mg/kg)	4,380.99
Acute toxicity - inhalation	
ATE inhalation (gases ppm)	207,874.88
ATE inhalation (vapours mg/l)	41.15
ATE inhalation (dusts/mists mg/l)	69.29
Skin corrosion/irritation	
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	
Serious eye damage/irritation	Causes serious eye irritation
Respiratory sensitisation	
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	Contains FATTY ACIDS C6 -19-BRANCHED, COBALT (2+) SALTS and 2-BUTANONE OXIME. May produce an allergic reaction
Germ cell mutagenicity	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Based on available data the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	Based on available data the classification criteria are not met.
Reproductive toxicity	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
Specific target organ toxicity - single exposure	
STOT - single exposure	May cause respiratory irritation.
Target organs	Central nervous system Kidneys Liver
Specific target organ toxicity - repeated exposure	
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure
Target organs	Liver Kidneys

11. TOXICOLOGICAL INFORMATION (continued)

Aspiration hazard	Based on available data the classification criteria are not met.
General information	There are no data available on the mixture itself. The mixture has been assessed following the method according to the "Classification, labelling and packaging of substances and mixtures" EC 1272/2008 and ensuing amendments and classified for toxicological hazards accordingly. See sections 2 and 3 for details.
Inhalation	Exposure to component solvent vapours concentration 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 kidney, liver and central nervous system.
Ingestion	Ingestion may cause nausea, diarrhoea and vomiting.
Skin contact	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. Contains butanoneoxime and fatty acids, C6 -19-branched, Cobalt (2+) salts - may produce an allergic reaction.
Eye contact	Irritating to eyes. Symptoms following overexposure may include the following: Redness.
	Pain. The liquid splashed in the eyes may cause irritation and reversible damage.
Route of entry	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.
Medical symptoms	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.

Toxicological information on ingredients.

XYLENE

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	3,523.0
Species	Rat
ATE oral (mg/kg)	3,523.0
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	4,200.0
Species	Rabbit
ATE dermal (mg/kg)	4,200.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} gases ppmV)	6,700.0
Species	Rat
Acute toxicity inhalation (LC_{50} vapours mg/l)	27.6
Species	Rat
Acute toxicity inhalation (LC_{50} dust/mist mg/l)	10.0
Species	Rat
ATE inhalation (gases ppm)	6,700.0
ATE inhalation (vapours mg/l)	27.6
ATE inhalation (dusts/mists mg/l)	10.0

11. TOXICOLOGICAL INFORMATION (continued)

Skin corrosion/irritation

Animal data	Dose: 24 and, 72 hours, Rabbit Irritating to skin.
Serious eye damage/irritation	Causes serious eye irritation
Respiratory sensitisation	Not sensitising
Skin sensitisation	Mouse: Not sensitising.
Germ cell mutagenicity	
Genotoxicity - in vitro	Chromosome aberration: Negative. Ames test: Negative. Gene mutation: Negative.
Genotoxicity - in vivo	Dominant lethal assay, intraperitoneal: Negative.
Carcinogenicity	NOAEL 500 mg/kg, Oral, Rat, male/female Did not show carcinogenic effects in animal experiments.
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
Reproductive toxicity - fertility	One-generation study - NOAEL >=500 ppm, Inhalation, Rat, male/female P Two-generation study - NOAEL 500 ppm, Inhalation, Rat, male/female P Two-generation study - NOAEL >500 ppm, Inhalation, male/female F1 Two-generation study -NOAEL >500 ppm, Inhalation, Rat, male/female F2 This substance has no evidence of toxicity to reproduction.
Reproductive toxicity - development	Maternal toxicity: - NOAEL: 500 ppm, Inhalation, Rat, female

Specific target organ toxicity - single exposure

STOT - single exposure	May cause respiratory irritation.
Target organs	Central nervous system Liver Kidneys

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	NOAEL 150 mg/kg, (3 months), Oral, Rat NOAEL >3.5 mg/l, (3 months), Inhalation, Rat, Dog
Target organs	Kidneys Liver
Aspiration hazard	Aspiration hazard - Category 1 If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious inhalation pulmonary lesions (medical survey during 48 hours)

HYDROCARBONS C9 AROMATICS

Acute toxicity - oral	
Acute toxicity oral (LD^{50} mg/kg)	3,492.0
Species	Rat
ATE oral (mg/kg)	3,492.0
Acute toxicity - dermal	
Acute toxicity dermal (LD^{50} mg/kg)	3,161.0
Species	Rabbit
ATE dermal (mg/kg)	3,161.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC^{50} vapours mg/l)	6.193
Species	Rat
Skin corrosion/irritation	
Animal data	Mild skin irritation (rabbit)

Serious eye damage/irritation

Serious eye damage/irritation

No eye irritation OECD 405 rabbit

Skin sensitisation

Guinea pig: Not sensitising.

Genotoxicity - in vitro

Chromosome aberration: Negative. Based on available data the classification criteria are not met.

Genotoxicity - in vivo

Chromosome aberration: Negative. Based on available data the classification criteria are not met.

Carcinogenicity Scientifically unjustified.

Reproductive toxicity -fertility

Fertility: - NOAEC 1500 ppm, Inhalation, Rat P

Reproductive toxicity -development

Developmental toxicity: - NOAEC: 100 ppm, Inhalation, Mouse

11. TOXICOLOGICAL INFORMATION (continued)

Specific target organ toxicity - single exposure

STOT - single exposure	Vapours may cause drowsiness and dizziness. May cause respiratory irritation.
Target organs	Central nervous system Respiratory system, lungs

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Based on available data the classification criteria are not met.

Aspiration hazard	Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

ETHYLBENZENE

Skin corrosion/irritation	
Animal data Dose:	15 mg, 24 hours , Rabbit Slightly irritating.
Serious eye damage/irritation	Severe eye irritant (500 mg dose)
Aspiration hazard	Aspiration hazard - Category 1 If swallowed the product may aspirate into the lungs

Acute toxicity - oral	
Acute toxicity oral (LD$_{50}$ mg/kg)	8,532.0
Species	Rat
ATE oral (mg/kg)	8,532.0
Acute toxicity - dermal	
Acute toxicity dermal (LD$_{50}$ mg/kg)	2,000.0
Species Rat	
Acute toxicity - inhalation	
Acute toxicity inhalation (LC$_{50}$ vapours mg/l)	10.8
Species	Rat
Notes (inhalation LC$_{50}$)	LC0 value - no mortality in test. Based on available data the classification criteria are not met.
ATE inhalation (vapours mg/l)	10.8
Skin corrosion/irritation	
Animal data	Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). Not irritating.
Serious eye damage/irritation	Slightly irritating - may cause slight corneal injury
Respiratory sensitisation	No information available.
Skin sensitisation	Guinea pig maximization test (GPMT) - : Not sensitising.
Germ cell mutagenicity	
Genotoxicity - in vitro	Ames test: Not mutagenic in AMES Test. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Not determined.
Carcinogenicity	NOAEL 300 ppm, Inhalation,

11. TOXICOLOGICAL INFORMATION (continued)

Reproductive toxicity - fertility	Two-generation study - NOAEL 300 ppm, Inhalation, Rat, male/female P Two generation study - NOAEL 1000 ppm, Inhalation, Rat, male/female F1 Two generation study - NOAEL 1000 ppm, Inhalation, Rat, male/female F2 Based on available data the classification criteria are not met.
Reproductive toxicity - development	Teratogenicity: - NOAEL: 1500 ppm, Inhalation, Rat, female Maternal toxicity: - NOAEL: 1500 ppm, Inhalation, Rat, female Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard — Based on available data the classification criteria are not met.

2-ETHYL-HEXANOIC ACID, ZIRCONIUM SALT

Skin corrosion/irritation	
Animal data	Erythema/eschar score: No erythema (0). (rabbit) Oedema score: No oedema (0). (rabbit) Not irritating.
Serious eye damage/irritation	Not irritating. (rabbit)
Respiratory sensitisation	No specific test data are available.
Skin sensitisation	Not sensitising. Guinea pig maximisation test Read-across data.
Germ cell mutagenicity	
Genotoxicity - in vitro	Chromosome aberration: Negative. Read-across data.
Genotoxicity - in vivo	Micronucleus test: Negative. Read-across data.
Reproductive toxicity	
Reproductive toxicity - fertility	One-generation study - NOAEL 300 mg/kg/day, Oral, Rat P Read across data
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 100 mg/kg/day, Oral, Rat Read-across data. Maternal toxicity: - NOAEL: 250 mg/kg/day, Oral, Rat Read-across data.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 3150 - 7080 mg/kg/day, Oral, Rat Read-across data.

11. TOXICOLOGICAL INFORMATION (continued)

BUTANONE OXIME

Acute toxicity - oral

Acute toxicity oral (LD50 mg/kg)	900.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD50 mg/kg)	1,000.0
Species	Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC50 vapours mg/l)	4.83
Species	Rat
ATE inhalation (vapours mg/l)	4.83

Skin corrosion/irritation

Animal data	Rabbit 24 hours - abraded and non-abraded skin Not fully reversible in 72 hours Slightly irritating.
Serious eye damage/irritation	Corrosive eye irritant in rabbits with corneal damage - Category 1(Irreversible).
Skin sensitisation	Buehler test: - Guinea pig: Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro	DNA damage and/or repair: Negative. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Gene mutation:: Negative. Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity	374 ppm, Inhalation, Rat A liver oncogen in male F-344 rats at a vapor concentration of 374 ppm. NOAEL 54 mg/l, Inhalation, Rat

Reproductive toxicity

Reproductive toxicity - fertility	Two-generation study - NOAEL >200 mg/kg, Oral, Rat F1
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 200 mg/kg, Oral, Rat

TRIZINC BIS(ORTHOPHOSPHATE) 90%

Acute toxicity - oral

Acute toxicity oral (LD50 mg/kg)	5,000.1
Species	Rat
ATE oral (mg/kg)	5,000.1

Acute toxicity - inhalation

Acute toxicity inhalation (LC50 dust/mist mg/l)	5,411.0
Species	Rat
ATE inhalation (dusts/mists mg/l)	5,411.0

12. ECOLOGICAL INFORMATION

Ecotoxicity — The mixture has been assessed following the method according to the "Classification, labelling and packaging of substances and mixtures" EC1272/2008 and ensuing amendments and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details.

12.1. Toxicity

Toxicity — There is no toxicity data for the mixture itself.

Ecological information on ingredients.

XYLENE

Acute toxicity - fish	LC_{50}, 96 hours: 2.6 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 3.82 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC_{50}, 72 hours: 2.2 mg/l, Freshwater algae
Acute toxicity - microorganisms	EC_{50}, 24 hours: 96 mg/l, Bacteria
Chronic toxicity - aquatic invertebrates	NOEC, 48 hours: 6.8 mg/l, Daphnia magna

HYDROCARBONS C9 AROMATICS

Acute toxicity - fish	LC_{50}, 96 hours: 9.2 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EL50, 48 hours: 3.2 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 2.9 mg/l, Pseudokirchneriella subcapitata
Chronic toxicity - aquatic invertebrates	NOELR, 21 days: 2.14 mg/l, Daphnia magna

ETHYLBENZENE

Acute toxicity - fish	LC_{50}, 96 hours: 4.2 mg/l,
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 1.8 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 96 hours: 3.6 mg/l, Pseudokirchneriella subcapitata
Chronic toxicity - aquatic invertebrates	NOEC, 7 days: 1 mg/l, Daphnia magna

2-METHOXY-1-METHYLETHYL ACETATE

Acute toxicity - fish	LC_{50}, 96 hours: 180 mg/l, Onchorhynchus mykiss (Rainbow trout) NOEC, 96 hours: 100 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 508 - 500 mg/l, Daphnia magna
Acute toxicity - aquatic plants	NOEC, 96 hours: > 1000 mg/l, Selenastrum capricornutum ErC50, 72 hours: >1000 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	EC_{50}, 30 minutes: > 1000 mg/l, Activated sludge

2-ETHYL-HEXANOIC ACID, ZIRCONIUM SALT

Acute toxicity - fish	NOELR, 96 hours: >=100 mg/l, Brachydanio rerio (Zebra Fish)
Acute toxicity - aquatic invertebrates	NOEC, 48 hours: 0.17 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 49.3 mg/l, Desmodesmus subspicatus
Acute toxicity - microorganisms	EC_{50}, 17 hours: 112.1 mg/l, Pseudomonas putida

BUTANONE OXIME

Acute toxicity - fish	LC_{50}, 96 hours: > 100 mg/l, Oryzias latipes (Red killifish)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: ~ 201 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: ~ 11.8 mg/l, Selenastrum capricornutum
Acute toxicity - microorganisms	EC_{50}, 17 hours: ~281 mg/l, Pseudomonas putida

12. ECOLOGICAL INFORMATION (continued)

TRIZINC BIS(ORTHOPHOSPHATE) 90%
Toxicity The aquatic toxicity of the zinc phosphate in this mixture was determined in respect of OECD Guidelines 201, 202, 203 and 211 according to Good Laboratory Practices (GLP) protocols. The studies sponsored by the supplier concluded that this mixture is neither of acute ecotoxicity nor chronic ecotoxicity.

Acute aquatic toxicity LE(C)$_{50}$	0.1 < L(E)C50 ⩽ 1
M factor (Acute)	1
Acute toxicity - fish	LC$_{50}$, 96 hours: >100 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	LC$_{50}$, 48 hours: >100 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC$_{50}$, 72 hours: >100 mg/l, Pseudokirchneriella subcapitata
Chronic aquatic toxicity M factor (Chronic)	1
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: >1 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability	There is no data for the mixture itself.
Ecological information on ingredients.	

XYLENE

Persistence and degradability	Readily biodegradable
Biodegradation	Degradation % >60: 28 days Readily biodegradable

HYDROCARBONS C9 AROMATICS

Persistence and degradability	The product is readily biodegradable
Phototransformation	Scientifically unjustified.
Stability (hydrolysis)	Not hydrolysable
Biodegradation	Water - Degradation (%) 78%: in 28 days

ETHYLBENZENE

Persistence and degradability	The product is readily biodegradable
Biodegradation	Degradation % 66: 10 days

2-METHOXY-1-METHYLETHYL ACETATE

Persistence and degradability	Readily biodegradable
Stability (hydrolysis)	pH4 - Half-life : 10 days @ 50°C pH7 - Half-life : 10 days @ 50°C pH9 - Half-life : 8.1 days @ 25°C The substance is effectively stable to degradation by hydrolysis .under any environmental conditions likely to be experienced.
Biodegradation	Water - Degradation (%) >90%: 28 days Activated sludge as innoculum The substance is readily biodegradable.

2-ETHYL-HEXANOIC ACID, ZIRCONIUM SALT

Phototransformation	Water - DT$_{50}$: 47.1 hours Read-across data.
Stability (hydrolysis)	Not hydrolysable Read-across data.
Biodegradation	Water - Degradation % 46.54: 10 days Water - Degradation % 73.82: 28 days

12. ECOLOGICAL INFORMATION (continued)

Persistence and degradability	The product is readily biodegradable
Stability (hydrolysis)	pH4 - Half-life : <0.3 minute @ °C Hydrolytically unstable at pH4 pH7 - Degradation % 44: 7 days @ 50°C pH9 - Half-life : > 14 days @ 50°C
Biodegradation	Water - Degradation (%) 70%: @ 18 days

12.3. Bioaccumulative potential

Bioaccumulative potential	There is no data for the mixture itself.
Partition coefficient	Not determined. See Section 12 for partition coefficient data on individual components

Ecological information on ingredients.

XYLENE

Bioaccumulative potential	Not expected to bioaccumulate. BCF: 25.9,
Partition coefficient	log Pow: 3.15

HYDROCARBONS C9 AROMATICS

Bioaccumulative potential	Substance is a UVCB. Standard tests for this endpoint are not appropriate.
Partition coefficient	Not applicable.

ETHYLBENZENE

Bioaccumulative potential	Potential for bioaccumulation is low.
Partition coefficient	log Pow: 3.1 @ 20°C

2-METHOXY-1-METHYLETHYL ACETATE

Bioaccumulative potential	Potential for bioaccumulation is low.
Partition coefficient	log Pow: 1.2 @ 20°C

2-ETHYL-HEXANOIC ACID, ZIRCONIUM SALT

Bioaccumulative potential	log Pow: 2.96, Read-across data.

BUTANONE OXIME

Bioaccumulative potential	BCF: 0.5 - 0.6, Cyprinus carpio (Common carp)

12.4. Mobility in soil

Mobility	There is no data on the mobility of the mixture itself.

XYLENE

Mobility	The product contains volatile solvents which are immiscible with water and will evaporate into the atmosphere. In soil the product has only slight mobility and will partially evaporate

HYDROCARBONS C9 AROMATICS

Mobility	Substance is a UVCB. Standard tests for this endpoint are not appropriate.

ETHYLBENZENE

Mobility	The product contains volatile solvents which are immiscible with water and will evaporate into the atmosphere. In soil the product has only slight mobility and will partially evaporate

12. ECOLOGICAL INFORMATION (continued)

2-METHOXY-1-METHYLETHYL ACETATE

Mobility	Potential for mobility in soil is very high.
Adsorption/desorption coefficient	Scientifically unjustified.

2-ETHYL-HEXANOIC ACID, ZIRCONIUM SALT

Henry's law constant	0.294 Pa m^3/mol @ 25°C Read-across data.

BUTANONE OXIME

Adsorption/desorption coefficient	Water - log Koc: 0.55 @ °C QSAR prediction Negligible adsorption to soil and sediment

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects	Not determined.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

General information	Do not allow to enter drains or water courses.
Disposal methods	Waste and emptied containers are controlled wastes and should be disposed of in accordance with The Environment Protection (Duty of Care) Regulations" (in England, Scotland, Wales) or The Controlled Waste (Duty of Care) Regulations (in Northern Ireland).
Waste class	The European List of Wastes classification of this product, when disposed of as waste is: Waste Code: Name of Waste (according to Decision 2000/532/EC): 08 01 11 Waste paint and varnish containing organic solvents or other dangerous substances 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. Using information provided in this safety data sheet, advice should be obtained from the local waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of empty containers contaminated by the product in accordance with local or national legal provisions.

14. TRANSPORT INFORMATION

Road transport notes	VISCOUS FLAMMABLE LIQUID DEROGATION In pack sizes less than 450 litres, under the terms of 2.2.3.1.5, this product is not subject to the provisions of ADR.
Sea transport notes	VISCOUS FLAMMABLE LIQUID DEROGATION: In pack sizes up to and including 30 litres, under the terms of 2.3.2.5, this product is not subject to the packaging, labelling and marking requirements of the IMDG Code, but both full documentation and placarding of cargo transport units is still required.
Air transport notes	VISCOUS FLAMMABLE LIQUID DEROGATION: The "viscosity exemption" provision does not apply to air transport.
14.1. UN number	UN 1263
14.2. UN proper shipping name	PAINT
14.3. Transport hazard class(es)	3
ADR/RID classification code	3
ADR/RID label	3
Transport labels	
14.4. Packing group	PG III
14.5. Environmental hazards	
Environmentally hazardous substance/marine pollutant	No.
14.6. Special precautions for user	Transport within the 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 accident or spillage.
EmS	F - E, S - E
ADR transport category	3
Tunnel restriction code	(D/E)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

15. REGULATORY INFORMATION

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

National regulations

The information in this Safety Data Sheet is required pursuant to the provisions of the Health and Safety at Work etc. Act and the Control of Substances Hazardous to Health Regulations which apply to the use of this product at work.

The Control of Substances Hazardous to Health Regulations 2002(SI 2002:1689) and amendments.

Control of Pollution Act 1974.

The Environmental Protection (Duty of Care) Regulations 1992 and amendments The Dangerous Substances & Explosive Atmospheres Regulations 2002(SI 2002:2776).

The Manual Handling Operations Regulations 1992, (SI 1992:2793)and amendment, The Stationery Office.

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Waste Framework Directive (Directive 2008/98/EC on waste) and amendments Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

Guidance

COSHH Essentials: easy steps to control chemicals, on-line guidance at http://www.hse.gov.uk/coshh/essentials/index.htm

Chemical Warehousing: Storage of Flammable Liquids in Containers, HSG51, HSE

Storage: Packaged Dangerous Substances HSG71, HSE.

Working with solvents: A guide to safe working practices, INDG273(rev1), HSE

Workplace Exposure Limits EH40.

Best Practice Guideline 5 "Safe Use of Gloves (June 2010) published by the European Solvents Industry Group (ESIG) available at www.esig.org/en/library/publications/bestpractice- guides

Control of Substances Hazardous to Health (Fifth Edition) (HSE Books L5)

Dangerous Substances and Explosive Atmospheres Regulations 2002, (HSE Books L138)

Safe use and handling of flammable liquids HSG140 (Second edition), HSE

A step by step guide to COSHH assessment HSG97, HSE

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures

for the assessment of exposure to chemical and biological agents

Paints Directive 2004/42/EC

VOC Content: EU limit for this product (Cat A/i) is: 500 g/litre.This product contains maximum 500 g/litre VOC.

15.2. Chemical safety assessment

No Chemical Safety Assessment

16. OTHER INFORMATION

General information
The product should not be used for purposes other than those shown in Section 1.

Key literature references and sources for data
Raw material supplier's Safety Data Sheets. Reference to ECHA Registered Substance dossiers.

Classification procedures according to Regulation (EC) 1272/2008
Unless indicated elsewhere in this safety data sheet, the classification of this mixture has been determined using a combination of test data, bridging principles and calculation.

Legal obligations
Revision comments
CLP 1.03 Safe use of mixture information added. This issue replaces CLP 1.02.
CLP 1.02 Formulation modified to remove lactation hazard (H362) Revised transport data.
Amended information in Section 8.
NOTE: Lines within the margin indicate significant changes from the previous revision.

Issued by	Chief Chemist
Revision date	02/07/2018
Revision	CLP 1.03
Supersedes date	16/03/2017
SDS number	20377

Hazard statements in full
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.
H361 Suspected of damaging fertility or the unborn child.
H361f Suspected of damaging fertility.
H373 May cause damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs (Hearing 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.
EUH208 Contains FATTY ACIDS C6 -19-BRANCHED, COBALT (2+) SALTS, BUTANONE OXIME. May produce an allergic reaction.

Safe Use of Mixtures Report

Our SUMI Code: A Version Number: 1.00 Issue Date: 02/07/2018

Purpose
This Safe Use of Mixtures Report has been compiled from information (including exposure scenarios) that we have received from our suppliers. We are obligated to pass information that is relevant to the safe use of our products (when they are used for their intended purpose and in line with our recommendations shown on our Product Data Sheet) down the supply chain. In general we manufacture mixtures and do not supply substances so we have reviewed the information provided to us and produced this Safe Use of Mixtures Report which should be read in conjunction with the relevant material safety Data Sheet and Product Data Sheet, best practice, process knowledge and guidance notes from the HSE and others when preparing risk assessments and designing safe systems of work. This information is passed down the chain as part of our obligations under REACH.

This report is prepared with our best reasonable endeavour using the information and knowledge in our possession at the date of publication.

SU3 Process Category
PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC10, PROC13, PROC15

SU3 Frequency and duration of use
Covers daily exposures up to 8 hours (unless stated)

SU3 Processes, tasks, activities covered
Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities.

SU3 Other Operational Conditions affecting worker exposure
Assumes use at not > 20°C above ambient. Assumes a good basic standard of occupational hygiene is implemented.

SU3 General exposures (closed systems)
Handle substance within a closed system.
Film formation - force drying (50 - 100°C). Stoving (>100°C). UV/EB radiation curing.
Handle substance within a closed system.

SU3 Mixing operations (closed systems) General exposures (closed systems)
Handle substance within a closed system. Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

SU3 Film formation - air drying
Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

SU3 Preparation of material for application. Mixing operations (open systems)
Provide a good standard of controlled ventilation (10 to 15 air changes per hour)

SU3 Spraying
Automatic/robotic: Carry out in a vented booth or extracted enclosure. Manual Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear a respirator conforming to EN140 with Type A/P2 filter or better.

SU3 Material transfers. Non-dedicated facility
Ensure material transfers are under containment or extract ventilation.

SU3 Material transfers. Dedicated facility
Ensure material transfers are under containment or extract ventilation.

SU3 Roller, spreader, flow application
Provide extract ventilation to points where emissions occur.

Safe Use of Mixtures Report

SU3 Dipping, immersion and pouring
Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

SU3 Laboratory activities
No other specific measures identified.

SU3 Material transfers. Drum/batch transfers. Transfer from/pouring from containers
Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear suitable gloves tested to EN374. Avoid splashing. Clear lines prior to decoupling.

SU3 Production of preparation or articles by tabletting, compression, extrusion or pelletisation
Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear suitable coveralls to prevent exposure to the skin.

SU3 Equipment cleaning and maintenance
Drain or remove substance from equipment prior to break-in or maintenance.

SU3 Storage Handle substance within a closed system.
SU22 Process Category PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC19

SU22 Processes, tasks, activities covered
Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities.

SU22 Frequency and duration of use
Covers daily exposures up to 8 hours (unless stated)

SU22 Other Operational Conditions affecting worker exposure
Assumes use at not > 20°C above ambient. Assumes a good basic standard of occupational hygiene is implemented.

SU22 General exposures (closed systems)
Handle substance within a closed system. Ensure material transfers are under containment or extract ventilation.

SU22 Filling/preparation of equipment from drums or containers. Handle substance within a closed sys
Ensure material transfers are under containment or extract ventilation.

SU22 Preparation of material for application
Handle substance within a closed system. Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

SU22 Film formation - air drying
Indoor: Provide extract ventilation to points where emissions occur. Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Outdoor: Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 1 hour. Wear suitable gloves tested to EN374.

SU22 Preparation of material for application.
Indoor: Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Avoid carrying out activities involving exposure for more than 1 hour. Outdoor: Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 1 hour.

SU22 Material transfers. Drum/batch transfers
Transfer via enclosed lines. Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).
Wear suitable gloves tested to EN374. Avoid splashing. Clear lines prior to decoupling.

Safe Use of Mixtures Report

SU22 Brush, Roller, spreader, flow application
Indoor. Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear a respirator conforming to EN140 with Type A/P2 filter or better. Outdoor. Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140 with Type A/P2 filter or better.

SU22 Spraying. Manual
Indoor: Carry out in a vented booth or extracted enclosure.
Outdoor: Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 4 hours. Wear suitable gloves tested to
EN374.Wear a respirator conforming to EN140 with Type A/P2 filter or better.

SU22 Dipping, immersion and pouring.
Indoor. Provide extract ventilation to points where emissions occur. Avoid carrying out activities involving exposure for more than 4 hours
Outdoor. Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140 with Type A/P2 filter or better.

SU22 Laboratory activity
Handle in a fume cupboard or under extract ventilation.

SU22 Equipment cleaning and maintenance
Drain down system prior to equipment break-in or maintenance. Avoid carrying out activities involving exposure for more than 4 hours.

SU22 Storage
Handle substance within a closed system. Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

Sectors of Use (SU) and Process Codes (PROC)
Sectors of Use (SU) and Process Codes (PROC) are defined in various regulations.
For the paint industry
SU 3 - Industrial Use of Coatings (eg within a factory on a production line)
SU22 - Use of Coatings by Professional Users (eg a painter and decorator)
Are the most relevant

Method of Preparation
In preparing this Safe Use of Mixtures Report we have relied heavily on the LCID. Specifically contained in Safe Use Information for Mixtures under REACH and the Lead Component (LCID) Methodology - A Brief Description (March 2016) published by CEFIC and their supporting spreadsheets published in 2017.

This approach has been endoursed by the European paint association (CEPE) and the British Coatings Federation (BCF).
The CEFIC approach uses information published by suppliers and in generally available sources including DNELs and PNECs and ECETOC-TRA data.

Further advice, support or assistance
If you require further advice, information, support or assistance please contact us.
Lead Component Identifcation (LCID) information

LC INHALATION	XYLENE
LC DERMAL	XYLENE
EYE HAZ 1	XYLENE