SAFETY DATA SHEET
Q.D. ENAMEL (General Colours)

This Safety Data Sheet is prepared in accordance with Annex II to Regulation (EC) No 1907/2006 as amended by Regulations (EU) No. 453/2010 and (EU) 2015/830

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

1.1. Product identifier

Product name Q.D. ENAMEL (General Colours)

Product number QD/GENERAL

Product SUMI code A

Product SUMI version number 1.00

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

Identified uses An air-drying, liquid solvent-borne paint for industrial and professional use. For metal finishing, apply by manual spray, or brush/roller for small areas.

Uses advised against Not for sale to or use by the general public.

1.3. Details of the supplier of the safety data sheet

Supplier

Manor Coating Systems Ltd
Otley Road
Shipley
West Yorkshire
BD17 7DP

Tel: 01274 587351
Fax: 01274531360
chiefchemist@manorcoatingsystems.co.uk

Contact person Chief Chemist

1.4. Emergency telephone number

Emergency telephone Manor Coating Systems Ltd. 01274 587351 may be contacted (Office hours only)

National emergency telephone number Members of the public should contact: 111 in UK, 01 809 2166 in Republic of Ireland

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards Flam. Liq. 3 - H226

Health hazards Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 STOT RE 2 - H373

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Q.D. ENAMEL (General Colours)

Hazard pictograms

Signal word	Warning
Hazard statements	EUH208 Contains COBALT BIS(2-ETHYLHEXANOATE). May produce an allergic reaction. H226 Flammable liquid and vapour. H332 Harmful if inhaled. 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. H412 Harmful to aquatic life with long lasting effects.
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, ETHYLBENZENE
Supplementary precautionary statements	P240 Ground and bond container and receiving equipment. P241 Use explosion-proof electrical equipment. P242 Use non-sparking tools. P243 Take action to prevent static discharges. P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. 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 or shower. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTRE/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. 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.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Q.D. ENAMEL (General Colours)

XYLENE **25-50%**

CAS number: 1330-20-7 EC number: 215-535-7

Classification
Flam. Liq. 3 - H226
Acute Tox. 4 - H312
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
STOT SE 3 - H335
STOT RE 2 - H373
Asp. Tox. 1 - H304
Aquatic Chronic 3 - H412

ETHYLBENZENE **1-5%**

CAS number: 100-41-4 EC number: 202-849-4

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

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

CAS number: 22464-99-9 EC number: 245-018-1

Classification
Repr. 2 - H361

COBALT BIS(2-ETHYLHEXANOATE) **0.1 - <1%**

CAS number: 136-52-7 EC number: 205-250-6

M factor (Acute) = 1

Classification
Eye Irrit. 2 - H319
Skin Sens. 1 - H317
Repr. 1B - H360Fd
Aquatic Acute 1 - H400
Aquatic Chronic 3 - H412

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.

SECTION 4: First aid measures

4.1. Description of first aid measures

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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	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	Treat symptomatically.

SECTION 5: Firefighting 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Due to the organic solvents' content of the mixture:
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.
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.

7.2. Conditions for safe storage, including any incompatibilities

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Storage precautions Store in accordance with the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR). 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.

SECTION 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-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

COBALT BIS(2-ETHYLHEXANOATE)

Long-term exposure limit (8-hour TWA): WEL 0.1 mg/m3(Sen)
as Co
WEL = Workplace Exposure Limit.
Sk = Can be absorbed through the skin.

Ingredient comments According to EH40 - List of approved workplace exposure limits.

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

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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

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; 0.327 mg/l
- marine water; 0.327 mg/l
- STP; 6.58 mg/l
- Sediment; 12.46 mg/kg
- Soil; 2.31 mg/kg

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

COBALT BIS(2-ETHYLHEXANOATE) (CAS: 136-52-7)

DNEL

Workers - Inhalation; Long term local effects: 235.1 µg/m3
General population - Inhalation; Long term local effects: 37 µg/m3
General population - Oral; Long term systemic effects: 27.6 µg/kg bw/day

PNEC

Fresh water; 0.00149 mg/l
marine water; 0.0069 mg/l
STP; 1.08 mg/l
Sediment (Freshwater); 27.8 mg/kg, dry weight (dw)
Sediment (Marinewater); 17.8 mg/l, dry weight (dw)
Soil; 123.1 mg/kg, dry weight (dw)

8.2. Exposure controls

Protective equipment

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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.

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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. * Spraying should normally be undertaken outdoor or in a vented booth. * Brushing or roller applications should be carried out outdoor or in good ventilation areas with 10 to 15 air changes per hour or more. * If applying continuously for less than 1 hour as a minimum, workers should wear a half respirator to EN405 (integral filter) or EN140 (replaceable filter), fitted with a filter for both particulates and organic vapours to A2P3 with an assigned protection factor of 20. * If applying continuously for more than 1 hour, workers should wear a full face powered respirator to EN12942, fitted with a suitable filter for both particulate (level 3) and organic vapours (level 2), with APF40. (Half face powered respirators are not normally available). Alternatively, a full powered hood respirator to EN12941, fitted a suitable filter for both particulate (level 3) and organic vapours (level 2) , or compressed air breathing apparatus can be worn. * Spraying and after spraying - Respirators suitable to application 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. * For other operations: If workers could be exposed to concentration above the exposure limit or where ventilation is poor, they must use a respirator, fitted with a filter suitable for both particulates and vapours, 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. * Respiratory protection should not be removed until the particulate and solvent vapour concentrations have fallen below the occupational exposure limits or the operator has entered a clean air area. * 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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	Various
Odour	aromatic hydrocarbons
Odour threshold	Not determined.
pH	pH (concentrated solution): The product is a non-aqueous mixture. Not applicable.
Melting point	-39.3°C
Initial boiling point and range	137 - 145°C @ 1013 hPa
Flash point	23 - 32°C 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

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Vapour density	Heavier than air
Relative density	1.0 - 1.3 @ 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	488°C
Decomposition Temperature	Not determined.
Viscosity	320 - 380 mPa•s @ 20°C
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 550 g/litre.

SECTION 10: Stability and 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.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - dermal

ATE dermal (mg/kg)	2,519.48

Acute toxicity - inhalation

ATE inhalation (gases ppm)	13,825.09
ATE inhalation (vapours mg/l)	53.33
ATE inhalation (dusts/mists mg/l)	15.35

Skin corrosion/irritation

Q.D. ENAMEL (General Colours)

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 COBALT BIS(2-ETHYLHEXANOATE). 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.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

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.

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 exposure 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.

Q.D. ENAMEL (General Colours)

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)	1,100.0
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
Skin corrosion/irritation	
Animal data	Dose: 24 and, 72 hours, Rabbit Irritating to skin.
Serious eye damage/irritation	
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory sensitisation	
Respiratory sensitisation	Not sensitising
Skin sensitisation	
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.

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Carcinogenicity

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

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	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)

ETHYLBENZENE

Skin corrosion/irritation

Animal data	Dose: 15 mg, 24 hours , Rabbit Slightly irritating.

Serious eye damage/irritation

Serious eye damage/irritation	Severe eye irritant (500 mg dose)

Aspiration hazard

Aspiration hazard	Aspiration hazard - Category 1 If swallowed the product may aspirate into the lungs

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

Serious eye damage/irritation	Not irritating. (rabbit)

Respiratory sensitisation

Respiratory sensitisation	No specific test data are available.

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Skin sensitisation

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.

COBALT BIS(2-ETHYLHEXANOATE)

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	3,129.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,001.0
Species	Rat

SECTION 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 classified for ecotoxicological properties accordingly. See sections 2 and 3 for details.

12.1. Toxicity

Toxicity There is no toxicity data for the mixture itself.

Ecological information on ingredients.

XYLENE

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 2.6 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 24 hours: 1 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC_{50}, 72 hours: 2.2 mg/l, Freshwater algae, Pseudokirchneriella subcapitata NOEC, 72 hours: 0.44 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	EC_{50}, 24 hours: 96 mg/l, Bacteria

Chronic aquatic toxicity

Q.D. ENAMEL (General Colours)

Chronic toxicity - fish early life stage	NOEC, 56 days: > 1.3 mg/l, Oncorhynchus mykiss (Rainbow trout)
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 1.57 mg/l, Daphnia magna

ETHYLBENZENE

Acute aquatic toxicity

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 aquatic toxicity

Chronic toxicity - aquatic invertebrates	NOEC, 7 days: 1 mg/l, Daphnia magna

2-ETHYL-HEXANOIC ACID, ZIRCONIUM SALT

Acute aquatic toxicity

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

COBALT BIS(2-ETHYLHEXANOATE)

Acute aquatic toxicity

$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1
Acute toxicity - fish	, : 1.5 mg/l,

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

ETHYLBENZENE

Q.D. ENAMEL (General Colours)

Persistence and degradability The product is readily biodegradable

Biodegradation - Degradation % 66: 10 days

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

12.3. 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

ETHYLBENZENE

Bioaccumulative potential Potential for bioaccumulation is low.

Partition coefficient log Pow: 3.1 @ 20°C

2-ETHYL-HEXANOIC ACID, ZIRCONIUM SALT

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

12.4. Mobility in soil

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

Ecological information on ingredients.

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

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

2-ETHYL-HEXANOIC ACID, ZIRCONIUM SALT

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

Q.D. ENAMEL (General Colours)

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.

SECTION 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.

Additional information

SECTION 14: Transport information

General This section contains basic classification information; specific information is not provided for all transport modes if not relevant for the product as supplied. Relevant modal regulations should be consulted if the product is transported onwards.

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. The information provided in this section may not be valid for transport by Air. Please call the number in section 1 of this safety data sheet to obtain more information about the transport of this product by air.

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

Q.D. ENAMEL (General Colours)

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.

SECTION 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.
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 Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
Control of Pollution Act 1974.

EU legislation

Regulation (EC) No 1907/2006 REACH
Regulation (EC) No 1272/2008 Classification, Labelling and Packaging (CLP)
ADR - European Agreement, the International Carriage of Dangerous Goods by Road
Waste Framework Directive (Directive 2008/98/EC on waste) and amendments

Q.D. ENAMEL (General Colours)

Guidance

Workplace Exposure Limits EH40.
Control of Substances Hazardous to Health 2002 (COSHH), HSE
A step by step guide to COSHH assessment HSG97, HSE
Safe use and handling of flammable liquids HSG140, HSE
Working with solvents: A guide to safe working practices, INDG273, HSE
Safe Use of Gloves, Best Practice Guideline 5, European Solvents Industry Group (ESIG)
Storage of Flammable Liquids in Containers, HSG51 HSE
Chemical Warehousing: The Storage of Packaged Dangerous Substances HSG71, HSE
The Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR)
BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents

15.2. Chemical safety assessment

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
BCF: Bioconcentration Factor.
CAS: Chemical Abstracts Service.
CMR: Carcinogen, Mutagen or Reproductive Toxicant
COSHH: Control of Substances Hazardous to Health Regulations
DNEL: Derived No Effect Level.
EC_{50}: 50% of maximal Effective Concentration.
EmS: Emergency Schedule (IMDG)
GHS: Globally Harmonized System.
IATA: International Air Transport Association.
ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
Kow: Octanol-water partition coefficient.
LC50: Lethal Concentration to 50 % of a test population.
LOAEC: Lowest Observed Adverse Effect Concentration.
LOAEL: Lowest Observed Adverse Effect Level.
LOEC: Lowest Observed Effect Concentration.
NOAEC: No Observed Adverse Effect Concentration.
NOAEL: No Observed Adverse Effect Level.
NOEC: No Observed Effect Concentration.
OECD: Organisation for Economic Co-operation and Development
OEL: Occupational Exposure Limit
PBT: Persistent, Bioaccumulative and Toxic substance.
PNEC: Predicted No Effect Concentration.
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
STOT: Specific Target Organ Toxicity
(STOT) RE: Repeated Exposure
(STOT) SE: Single Exposure
STP: Sewage Treatment Plant
SVHC: Substances of Very High Concern.
VOC: Volatile Organic Compound
vPvB: Very Persistent and Very Bioaccumulative.

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 SI 2019 No. 720

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.

Q.D. ENAMEL (General Colours)

Legal obligations

Issued by	Chief Chemist
Revision date	04/03/2022
Revision	CLP 1.06
Supersedes date	13/01/2022
SDS number	10486
Hazard statements in full	H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. 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. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H360Fd May damage fertility. Suspected of damaging the unborn child. H361 Suspected of damaging fertility or the unborn child. H373 May cause damage to organs (Hearing organs) through prolonged or repeated exposure. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H412 Harmful to aquatic life with long lasting effects. EUH208 Contains COBALT BIS(2-ETHYLHEXANOATE). May produce an allergic reaction.

The information of this SDS is based on the present state of our knowledge and on current legislation.
It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.
The product should not to be used for purposes other than those shown in section 1 without first referring to the supplier and obtaining written handling instructions.
As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.
The information in this safety data sheet does not constitute the user's own assessment of workplace risks as required by other health and safety legislation.

Manor Coating Systems Limited
Safe Use of Mixtures Report

Our SUMI Code: A
Version Number: 1.00
Issue Date: 06/09/2017

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.

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 > 20oC 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.

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 activitie	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