SAFETY DATA SHEET
RUSTINS POLYURETHANE VARNISH GLOSS & SATIN Cobalt Free

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 RUSTINS POLYURETHANE VARNISH GLOSS & SATIN Cobalt Free

Product number RUPVFREE

Product SUMI code

Product SUMI version number

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

1.3. Details of the supplier of the safety data sheet

Supplier

Rustins Ltd
Waterloo Road
London
NW2 7TX
United Kingdom

Tel: +44 (0)20 8450 4666
Fax: +44 (0)20 8452 2008
rustins@rustins.co.uk

1.4. Emergency telephone number

Emergency telephone Rustins Ltd. +44 (0)208 450 4666 OFFICE HOURS ONLY MON. - FRI. 08:00 - 16:30

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 (EC 1272/2008)

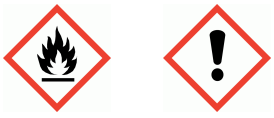
Physical hazards Flam. Liq. 3 - H226

Health hazards STOT SE 3 - H336

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms



Signal word Warning

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Hazard statements	H226 Flammable liquid and vapour. H336 May cause drowsiness or dizziness.
Precautionary statements	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing vapour/ spray. P271 Use only outdoors or in a well-ventilated area. Ensure maximum ventilation during application and drying. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. Remove as much product as possible from brushes or rollers, before cleaning. Special precautions should be taken during surface preparation of pre1960s paint surfaces as they may containharmful lead. For further advice contact Manor Technical Services Department. Not recommended for interior use on large surfaces, or in confined spaces. Avoid the inhalation of dust. Wear a suitable face mask if dry sanding P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302/P352 IF ON SKIN: Wash with plenty of soap and water. Do not use solvent thinners or white spirit. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Lift with care - gross weight (5 litres) does not exceed 7 Kgs. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. To avoid the risk of spillage, always store and transport in a secure upright position. Keep cool. P501 Dispose of contents/ container in accordance with national regulations. Do not empty into drains/watercourses
Supplemental label information	EUH066 Repeated exposure may cause skin dryness or cracking. EUH210 Safety data sheet available on request. VOC Content: High (25 - 50%) VOCs (Volatile Organic Compounds) contribute to atmospheric pollution.
Contains	HYDROCARBONS, C9 - C11. n-alkanes, isoalkanes,cyclics,<2% aromatics
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. P312 Call a POISON CENTRE/doctor if you feel unwell. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P403+P235 Store in a well-ventilated place. Keep cool.
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

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HYDROCARBONS, C9 - C11. n-alkanes, isoalkanes,cyclics,<2% aromatics		**25-50%**
CAS number: 1174522-20-3	EC number: 919-857-5	REACH registration number: 01-2119463258-33-XXXX
Classification Flam. Liq. 3 - H226 STOT SE 3 - H336 Asp. Tox. 1 - H304		

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		

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

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 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

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Notes for the doctor No specific recommendations.

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 Fire will produce dense black smoke.
Exposure to decomposition products may cause a health hazard.
Appropriate breathing apparatus may be required.

Hazardous combustion products Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m3. Oxides of carbon. Oxides of nitrogen.

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

Personal precautions 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 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 For personal protection, see Section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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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

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

HYDROCARBONS, C9 - C11. n-alkanes, isoalkanes,cyclics,<2% aromatics

Long-term exposure limit (8-hour TWA): SUP 150 ppm 1000 mg/m³

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

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WEL = Workplace Exposure Limit

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)

HYDROCARBONS, C9 - C11. n-alkanes, isoalkanes,cyclics,<2% aromatics (CAS: 1174522-20-3)

DNEL
Professional - Dermal; Long term : 208 mg/kg/day
Professional - Inhalation; Long term : 871 (8 hr) mg/m³
Consumer - Dermal; Long term : 125 mg/kg/day
Consumer - Inhalation; Long term : 185 mg/m³
Consumer - Oral; Long term : 125 mg/kg/day

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

8.2. Exposure controls

Protective equipment

Safe use of mixture

Two-pack product protection

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. See Respiratory Equipment below.

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.

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Hand protection	Wear chemical resistant gloves classified under "Standard EN374: Protective gloves against chemicals and micro-organisms" made from PE, PVA or Viton gloves. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin, 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. Do not eat, drink or smoke when using this product.
Respiratory protection	For application by brush or roller, under good conditions of general or local ventilation. particulates are unlikely to be a problem. If solvent vapour concentrations are greater than the occupational exposure limits (see section 8.1), wear, as a minimum, a certified reusable half face mask respirator fitted with a filter suitable for the removal of solvent vapours. If vigorous application by brush or roller is undertaken that generates airborne mist and particulates, then treat as for spray application. Enclosed spaces with little or no ventilation: compressed air breathing apparatus should always be worn. On occasions where continuous spraying or when spraying for extended periods (greater than 1 hour) is undertaken, fan-powered reusable full face mask respirators or compressed air breathing apparatus should always be worn by the spray operators even when good ventilation is provided. For other operators, whether spraying or not, working inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapours. In such circumstances, all operators should also wear fan-powered reusable full face mask respirators or compressed air breathing apparatus until such time as the particulates and solvent vapour concentration have fallen below the appropriate occupational exposure limits (see Section 8.1). When spraying only occurs for short periods of time, less than 1 hour, workers must, as a minimum, use appropriate, certified, half face mask respirators fitted with a combination filter suitable for the removal of both particulates and solvent vapours. Respiratory protection should not be removed until the particulate and solvent vapour concentrations have fallen below the below the occupational exposure limits or the operator has entered a clean air area. Compressed air breathing apparatus: e.g. a hood with a supply of compressed air from a clean source or a fan powered reusable full face mask respirator. Respiratory protection should be selected so that it is suitable for the user, i.e. facial hair may interfere with the effectiveness of half mask or full face mask respirators
Environmental exposure controls	Do not allow to enter drains or water courses.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Various
Odour	Naphthenic
Odour threshold	Not determined.
pH	Not determined.
Melting point	<-20°C
Initial boiling point and range	145 - 200°C @ 760 mm Hg
Flash point	38 - 40°C Setaflash closed cup.
Evaporation rate	0.11
Flammability (solid, gas)	Not determined. Material is not a solid or gas
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 0.6 % Upper flammable/explosive limit: 8 %
Vapour pressure	0.21 kPa @ 20°C
Vapour density	Heavier than air
Solubility(ies)	< 0.1 g/100 g water @ 20°C Immiscible with water.
Partition coefficient	Not determined. See Section 12 for partition coefficient data on individual components.
Auto-ignition temperature	230 - 270°C
Decomposition Temperature	Not determined.
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

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 in order to avoid exothermic reactions.

10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames 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

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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 - inhalation

ATE inhalation (vapours mg/l) 230.0

Skin corrosion/irritation

Skin corrosion/irritation Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation There is no evidence that the material can lead to respiratory hypersensitivity.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

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 Vapours may cause drowsiness and dizziness.

Target organs Central nervous system Kidneys

Specific target organ toxicity - repeated exposure

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

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.

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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.
Medical considerations	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.

Toxicological information on ingredients.

HYDROCARBONS, C9 - C11. n-alkanes, isoalkanes,cyclics,<2% aromatics

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	5,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	5,000.0
Species	Rabbit
ATE dermal (mg/kg)	5,000.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	4.95
Species	Rabbit

Skin corrosion/irritation

Animal data	Prolonged skin contact may defat the skin and produce dermatitis.

Serious eye damage/irritation

Serious eye damage/irritation	Slightly irritating.

Respiratory sensitisation

Respiratory sensitisation	No information available.

Skin sensitisation

Skin sensitisation	Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro	Ames test: Negative. Chromosome aberration: Negative. Gene mutation: Negative.

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Genotoxicity - in vivo	Micronucleus test: Negative.

Carcinogenicity

Carcinogenicity	Not expected to be carcinogenic.

Reproductive toxicity

Reproductive toxicity - fertility	By analogy with comparable product: Animal testing did not show any effects on fertility Parental Toxicity - LOAEL 1500 mg/kg/day, , Fertility - NOAEL 1500 mg/kg/day, Oral, Rat
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 5.22 mg/l, , Maternal toxicity: - NOAEL: >=5.22 mg/l, Inhalation, Rat

Specific target organ toxicity - single exposure

STOT - single exposure	Central nervous system depression including narcotic effects such as drowsiness, narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo.
Target organs	Central nervous system Kidneys

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	By analogy with comparable product: Based on available data , the classification criteria are not met. NOAEL >=11.6 mg/l, Inhalation, Rat

Aspiration hazard

Aspiration hazard	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)

Inhalation	Vapours have a narcotic effect. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Nausea, vomiting.
Ingestion	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)
Skin contact	Prolonged contact may cause dryness of the skin.
Eye contact	May cause temporary eye irritation.

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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.

Skin sensitisation

Skin sensitisation	Not sensitising. Guinea pig maximisation test Read-across data.

Germ cell mutagenicity

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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.

SECTION 12: Ecological information

Ecotoxicity 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" 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. Do not allow to enter drains or water courses.

12.1. Toxicity

Toxicity There is no toxicity data for the mixture itself.

Acute aquatic toxicity

Acute toxicity - aquatic invertebrates	Not determined.
Acute toxicity - aquatic plants	Not determined.
Acute toxicity - microorganisms	Not determined.
Acute toxicity - terrestrial	Not determined.

Ecological information on ingredients.

HYDROCARBONS, C9 - C11. n-alkanes, isoalkanes,cyclics,<2% aromatics

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: > 1000 mg/l, Oncorhynchus mykiss (Rainbow trout) OECD
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: > 1000 mg/l, Daphnia magna OECD
Acute toxicity - aquatic plants	IC_{50}, 72 hours: >1000 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	EC_{50}, 48 hours: 43.98 mg/l,

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 0.23 mg/l, Daphnia magna

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Acute aquatic toxicity

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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

12.2. Persistence and degradability

Persistence and degradability	There is no data for the mixture itself.
Phototransformation	Not determined.
Stability (hydrolysis)	Not determined.
Biodegradation	Not determined.
Biological oxygen demand	Not determined.
Chemical oxygen demand	Not determined.

Ecological information on ingredients.

HYDROCARBONS, C9 - C11. n-alkanes, isoalkanes,cyclics,<2% aromatics

Persistence and degradability	28 days - 80% readily biodegradable - OECD 301F

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.

HYDROCARBONS, C9 - C11. n-alkanes, isoalkanes,cyclics,<2% aromatics

Bioaccumulative potential	May accumulate in soil and water systems.
Partition coefficient	log Pow: 5 - 6.7

2-ETHYL-HEXANOIC ACID, ZIRCONIUM SALT

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

12.4. Mobility in soil

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Mobility The product is immiscible with water and will spread on the water surface. The product contains organic solvents which will evaporate easily from all surfaces.

Ecological information on ingredients.

HYDROCARBONS, C9 - C11. n-alkanes, isoalkanes,cyclics,<2% aromatics

Mobility The product contains organic solvents which will evaporate easily from all surfaces. In soil the product has only slight mobility and will partially evaporate The product has poor water-solubility.

Surface tension 0.0237 mN/m @ 25°C

2-ETHYL-HEXANOIC ACID, ZIRCONIUM SALT

Henry's law constant 0.294 Pa m³/mol @ 25°C Read-across data.

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.

14.1. UN number

UN 1263

14.2. UN proper shipping name

PAINT

14.3. Transport hazard class(es)

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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

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 relevant.

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.
Control of Pollution (Amendment) Act 1989
The Environmental Protection (Duty of Care) Regulations 1992 and amendments
The Waste (England and Wales) Regulations 2011 (SI 2011 No. 988)
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"].

EU legislation Regulation (EC) No 1907/2006 REACH
Regulation (EC) No 1272/2008 Classification, Labelling and Packaging (CLP)
Directive 2004/42/EC on Volatile Organic Compounds (VOC)
Waste Framework Directive (Directive 2008/98/EC on waste) and amendments
ADR - European Agreement, the International Carriage of Dangerous Goods by Road

Guidance

COSHH Essentials: http://www.hse.gov.uk/coshh/essentials/index.htm
Storage of Flammable Liquids in Containers, HSG51 HSE
Chemical Warehousing: The Storage of Packaged Dangerous Substances HSG71, 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)
Control of Substances Hazardous to Health 2002 (COSHH), HSE
The Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR)
Safe use and handling of flammable liquids HSG140, HSE
A step by step guide to COSHH assessment HSG97, HSE
Workplace Exposure Limits EH40.
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

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
BCF: Bioconcentration Factor.
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.
LC_{50}: Lethal Concentration to 50 % of a test population.
LD_{50}: Lethal Dose to 50% of a test population (Median Lethal Dose).
LOAEC: Lowest Observed Adverse Effect Concentration.
LOAEL: Lowest Observed Adverse Effect Level.
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.
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.

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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	This is the first issue.
Issued by	Chief Chemist
Revision date	09/07/2020
Revision	CLP 1.00
SDS number	20772
Hazard statements in full	H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H336 May cause drowsiness or dizziness. H361 Suspected of damaging fertility or the unborn child.

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.