

Duralux Marine Enamel Signal Orange - M733 ICP Building Solutions Group

Version No: 1.1
Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Issue Date: 10/15/2021 Print Date: 10/18/2021 S.GHS.USA.EN

SECTION 1 Identification

Product Identifier

| Trouble full full full full full full full fu | | |
|---|--|--|
| Product name | Duralux Marine Enamel Signal Orange - M733 | |
| Synonyms | Not Available | |
| Proper shipping name | Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base | |
| Other means of identification | cation Not Available | |

Recommended use of the chemical and restrictions on use

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

| Registered company name | ICP Building Solutions Group | |
|-------------------------|---|--|
| Address | 150 Dascomb Road Andover MA 01810 United States | |
| Telephone | 78-623-9980 | |
| Fax | Not Available | |
| Website | www.icpgroup.com | |
| Email | sds@icpgroup.com | |

Emergency phone number

| Association / Organisation | Chemtel |
|-----------------------------------|----------------|
| Emergency telephone numbers | 1-800-255-3924 |
| Other emergency telephone numbers | 1-813-248-0585 |

SECTION 2 Hazard(s) identification

Classification of the substance or mixture



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

Classification

Flammable Liquids Category 3, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3, Serious Eye Damage/Eye Irritation Category 1, Skin Corrosion/Irritation Category 2, Carcinogenicity Category 1A, Reproductive Toxicity Category 2, Sensitisation (Skin) Category 1, Aspiration Hazard Category 1, Hazardous to the Aquatic Environment Long-Term Hazard Category 3

Label elements

Hazard pictogram(s)









Signal word

Danger

Hazard statement(s)

| H226 | Flammable liquid and vapour. |
|------|------------------------------------|
| H336 | May cause drowsiness or dizziness. |

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| H318 | Causes serious eye damage. |
|------|--|
| H315 | Causes skin irritation. |
| H350 | May cause cancer. |
| H361 | Suspected of damaging fertility or the unborn child. |
| H317 | May cause an allergic skin reaction. |
| H304 | May be fatal if swallowed and enters airways. |
| H412 | Harmful to aquatic life with long lasting effects. |

Hazard(s) not otherwise classified

Not Applicable

Precautionary statement(s) General

| P101 | If medical advice is needed, have product container or label at hand. | |
|-------------------------------------|---|--|
| P102 Keep out of reach of children. | | |

Precautionary statement(s) Prevention

| P202 | P202 Do not handle until all safety precautions have been read and understood. | |
|------|--|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. | |
| P233 | Keep container tightly closed | |
| P240 | Ground/bond container and receiving equipment | |
| P241 | Use explosion-proof (electrical/ventilating/lighting) equipment | |
| P242 | Use only non-sparking tools | |
| P243 | Take precautionary measures against static discharge | |
| P260 | Do not breathe dust/fumes/gas/mist/vapors/spray | |
| P264 | Wash thoroughly after handling | |
| P271 | Use only outdoors or in a well-ventilated area. | |
| P272 | Contaminated work clothing should not be allowed out of the workplace. | |
| P273 | Avoid release to the environment | |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. | |

Precautionary statement(s) Response

| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider. | | |
|----------------|---|--|--|
| P331 | Do NOT induce vomiting. | | |
| P304+P340 | F INHALED: Remove person to fresh air and keep comfortable for breathing. | | |
| P308+P313 | Exposed or concerned: Get medical advice/attention | | |
| P303+P361+P353 | ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse SKIN with water (or shower) | | |
| P333+P313 | IF Skin or rash occurs: Get medical advice/attention. | | |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. | | |
| P337+P313 | IF Eye irritation persists: Get medical advice/attention | | |
| P363 | Wash contaminated clothing before reuse. | | |

Precautionary statement(s) Storage

| P403+P235 | Store in a well-ventilated place. Keep cool. | |
|-----------|--|--|
| P405 | Store locked up. | |

Precautionary statement(s) Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|-------------|-----------|---|
| 1330-20-7 | 1-5 | xylene |
| 100-41-4 | .1-1 | <u>ethylbenzene</u> |
| 64741-91-9. | 7-13 | C14-20 aliphatics (<=2% aromatics) |
| 64742-47-8 | 7-13 | distillates, petroleum, light, hydrotreated |
| 68412-54-4 | 7-13 | nonylphenol ethoxylate, branched |
| 13463-67-7* | 1-5 | Titanium Dioxide Ti02 |
| 22464-99-9 | .1-1 | zirconium 2-ethylhexanoate |

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 CAS No
 %[weight]
 Name

 96-29-7
 .1-1
 methyl ethyl ketoxime

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 First-aid measures

| Description of first aid measures | | |
|-----------------------------------|---|--|
| Eye Contact | If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. | |
| Skin Contact | If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. | |
| Inhalation | If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary. | |
| Ingestion | If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice. Avoid giving milk or oils. Avoid giving alcohol. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. | |

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

For petroleum distillates

- In case of ingestion, gastric lavage with activated charcoal can be used promptly to prevent absorption decontamination (induced emesis or lavage) is controversial and should be considered on the merits of each individual case; of course the usual precautions of an endotracheal tube should be considered prior to lavage, to prevent aspiration.
- Individuals intoxicated by petroleum distillates should be hospitalized immediately, with acute and continuing attention to neurologic and cardiopulmonary function.
- Positive pressure ventilation may be necessary.
- Acute central nervous system signs and symptoms may result from large ingestions of aspiration-induced hypoxia.
- After the initial episode,individuals should be followed for changes in blood variables and the delayed appearance of pulmonary oedema and chemical pneumonitis. Such patients should be followed for several days or weeks for delayed effects, including bone marrow toxicity, hepatic and renal impairment Individuals with chronic pulmonary disease will be more seriously impaired, and recovery from inhalation exposure may be complicated.
- Gastrointestinal symptoms are usually minor and pathological changes of the liver and kidneys are reported to be uncommon in acute intoxications.
- · Chlorinated and non-chlorinated hydrocarbons may sensitize the heart to epinephrine and other circulating catecholamines so that arrhythmias may occur.Careful consideration of this potential adverse effect should precede administration of epinephrine or other cardiac stimulants and the selection of bronchodilators.

BP America Product Safety & Toxicology Department

For acute or short term repeated exposures to xylene:

- Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal.
- Pulmonary absorption is rapid with about 60-65% retained at rest
- Primary threat to life from ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO2 < 50 mm Hg or pCO2 > 50 mm Hg) should be intubated.
- Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.

BIOLOGICAL EXPOSURE INDEX - BEI

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

 Determinant
 Index
 Sampling Time
 Comments

 Methylhippu-ric acids in urine
 1.5 gm/gm creatinine
 End of shift

 2 mg/min
 Last 4 hrs of shift

SECTION 5 Fire-fighting measures

Extinguishing media

- Foam.
- Dry chemical powder.

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Special hazards arising from the substrate or mixture

Fire Incompatibility

▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Special protective equipment and precautions for fire-fighters

Fire Fighting

- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive
- Liquid and vapour are flammable

Combustion products include:

▶ Moderate fire hazard when exposed to heat or flame.

Fire/Explosion Hazard

carbon dioxide (CO2) carbon monoxide (CO)

metal oxides

other pyrolysis products typical of burning organic material.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

| Minor Spills | Remove all ignition sources.Clean up all spills immediately. |
|--------------|---|
| Major Spills | Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. |

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for safe handling

The conductivity of this material may make it a static accumulator., A liquid is typically considered nonconductive if its conductivity is below 100 pS/m and is considered semi-conductive if its conductivity is below 10 000 pS/m., Whether a liquid is nonconductive or semi-conductive, the precautions are the same., A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a liquid.

Safe handling

- ▶ Containers, even those that have been emptied, may contain explosive vapours.
- Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
- ▶ Electrostatic discharge may be generated during pumping this may result in fire.
- Ensure electrical continuity by bonding and grounding (earthing) all equipment.
- Avoid all personal contact, including inhalation.
- ▶ Wear protective clothing when risk of overexposure occurs.
- ▶ DO NOT allow clothing wet with material to stay in contact with skin

Other information

- Store in original containers in approved flammable liquid storage area.
- ▶ Store away from incompatible materials in a cool, dry, well-ventilated area.

Conditions for safe storage, including any incompatibilities

Suitable container

Storage incompatibility

- Packing as supplied by manufacturer.
- Plastic containers may only be used if approved for flammable liquid.
- For low viscosity materials (i): Drums and jerry cans must be of the non-removable head type. (ii): Where a can is to be used as an inner package, the can must have a screwed enclosure.

Xylenes

- ready ignite or explode in contact with strong oxidisers, 1,3-dichloro-5,5-dimethylhydantoin, uranium fluoride
- ▶ attack some plastics, rubber and coatings
- may generate electrostatic charges on flow or agitation due to low conductivity.
- Vigorous reactions, sometimes amounting to explosions, can result from the contact between aromatic rings and strong oxidising agents.
- Aromatics can react exothermically with bases and with diazo compounds.

For alkyl aromatics:

The alkyl side chain of aromatic rings can undergo oxidation by several mechanisms. The most common and dominant one is the attack by oxidation at benzylic carbon as the intermediate formed is stabilised by resonance structure of the ring.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source Ingredient Material name TWA STFL Peak Notes Version No: **1.1** Page **5** of **15** Issue Date: **10/15/2021**

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|-------|-------|------|-----|------|

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|---|---|---|------------------------|------------------------|------------------|--|
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | xylene | Xylenes (o-, m-, p-isomers) | 100 ppm / 435 mg/m3 | Not Available | Not Available | Not Available |
| US ACGIH Threshold Limit Values (TLV) | xylene | Xylene (all isomers) | 100 ppm | 150 ppm | Not Available | (); A4; BEI |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | ethylbenzene | Ethyl benzene | 100 ppm / 435 mg/m3 | Not Available | Not Available | Not Available |
| US NIOSH Recommended Exposure Limits (RELs) | ethylbenzene | Ethyl benzene | 100 ppm / 435 mg/m3 | 545 mg/m3 / 125 ppm | Not Available | Not Available |
| US ACGIH Threshold Limit Values (TLV) | ethylbenzene | Ethyl benzene | 20 ppm | Not Available | Not Available | (); A3; BEI |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | C14-20 aliphatics (<=2% aromatics) | Oil mist, mineral | 5 mg/m3 | Not Available | Not Available | Not Available |
| US ACGIH Threshold Limit Values (TLV) | C14-20 aliphatics (<=2% aromatics) | Mineral oil, excluding metal working fluids - Pure, highly and severely refined (Inhalable particulate matter) | 5 mg/m3 | Not Available | Not Available | A4 |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | distillates, petroleum, light, hydrotreated | Oil mist, mineral | 5 mg/m3 | Not Available | Not Available | Not Available |
| US ACGIH Threshold Limit Values (TLV) | distillates, petroleum, light, hydrotreated | Mineral oil, excluding metal working fluids - Poorly and mildly refined | Not Available | Not Available | Not Available | A2 |
| US ACGIH Threshold Limit Values (TLV) | distillates, petroleum, light, hydrotreated | Mineral oil, excluding metal working fluids - Pure, highly and severely refined (Inhalable particulate matter) | 5 mg/m3 | Not Available | Not Available | A4 |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | Titanium Dioxide Ti02 | Inert or Nuisance Dust: Respirable fraction | 5 mg/m3 / 15 mppcf | Not Available | Not Available | Not Available |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | Titanium Dioxide Ti02 | Inert or Nuisance Dust: Total Dust | 15 mg/m3 / 50 mppcf | Not Available | Not Available | Not Available |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | Titanium Dioxide Ti02 | Titanium dioxide - Total dust | 15 mg/m3 | Not Available | Not Available | Not Available |
| US NIOSH Recommended Exposure Limits (RELs) | Titanium Dioxide Ti02 | Titanium dioxide | Not Available | Not Available | Not Available | Ca; See Appendix A |
| US ACGIH Threshold Limit Values (TLV) | Titanium Dioxide Ti02 | Titanium dioxide | 10 mg/m3 | Not Available | Not Available | (A4) |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | zirconium 2-ethylhexanoate | Inert or Nuisance Dust: Total Dust | 15 mg/m3 / 50 mppcf | Not Available | Not Available | Not Available |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | zirconium 2-ethylhexanoate | Inert or Nuisance Dust: Respirable fraction | 5 mg/m3 / 15 mppcf | Not Available | Not Available | Not Available |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | zirconium 2-ethylhexanoate | Particulates Not Otherwise Regulated (PNOR)- Total dust | 15 mg/m3 | Not Available | Not Available | Not Available |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | zirconium 2-ethylhexanoate | Zirconium compounds (as Zr) | 5 mg/m3 | Not Available | Not Available | Not Available |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | zirconium 2-ethylhexanoate | Particulates Not Otherwise Regulated (PNOR)- Respirable fraction | 5 mg/m3 | Not Available | Not Available | Not Available |
| US NIOSH Recommended Exposure Limits (RELs) | zirconium 2-ethylhexanoate | Particulates not otherwise regulated | Not Available | Not Available | Not Available | See Appendix D |
| US NIOSH Recommended Exposure Limits (RELs) | zirconium 2-ethylhexanoate | Zirconium compounds (as Zr) | 5 mg/m3 | 10 mg/m3 | Not Available | [*Note: The REL applies to all zirconium compounds (as Zr) except Zirconium tetrachloride.] |
| US ACGIH Threshold Limit Values (TLV) | zirconium 2-ethylhexanoate | Zirconium and compounds, as Zr | 5 mg/m3 | 10 mg/m3 | Not Available | A4 |

Emergency Limits

| Ingredient | TEEL-1 | TEEL-2 | TEEL-3 |
|---|---------------|---------------|---------------|
| xylene | Not Available | Not Available | Not Available |
| ethylbenzene | Not Available | Not Available | Not Available |
| C14-20 aliphatics (<=2% aromatics) | 1,100 mg/m3 | 1,800 mg/m3 | 40,000 mg/m3 |
| distillates, petroleum, light, hydrotreated | 140 mg/m3 | 1,500 mg/m3 | 8,900 mg/m3 |
| nonylphenol ethoxylate, branched | 30 mg/m3 | 330 mg/m3 | 2,000 mg/m3 |
| Titanium Dioxide Ti02 | 30 mg/m3 | 330 mg/m3 | 2,000 mg/m3 |
| methyl ethyl ketoxime | 30 ppm | 56 ppm | 250 ppm |

| Ingredient | Original IDLH | Revised IDLH |
|--------------|---------------|---------------|
| xylene | 900 ppm | Not Available |
| ethylbenzene | 800 ppm | Not Available |

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| Ingredient | Original IDLH | Revised IDLH |
|---|---------------|---------------|
| C14-20 aliphatics (<=2% aromatics) | 2,500 mg/m3 | Not Available |
| distillates, petroleum, light, hydrotreated | 2,500 mg/m3 | Not Available |
| nonylphenol ethoxylate, branched | Not Available | Not Available |
| Titanium Dioxide Ti02 | 5,000 mg/m3 | Not Available |
| zirconium 2-ethylhexanoate | 25 mg/m3 | Not Available |
| methyl ethyl ketoxime | Not Available | Not Available |

Occupational Exposure Banding

| Ingredient | Occupational Exposure Band Rating | Occupational Exposure Band Limit |
|-------------------------------------|--|---|
| nonylphenol ethoxylate, branched | E | ≤ 0.1 ppm |
| methyl ethyl ketoxime | D | > 0.1 to ≤ 1 ppm |
| Notes: | Occupational exposure banding is a process of assigning chemicals into s adverse health outcomes associated with exposure. The output of this pro range of exposure concentrations that are expected to protect worker hea | cess is an occupational exposure band (OEB), which corresponds to a |

Exposure controls

Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

Personal protection









Eye and face protection

- Safety glasses with side shields.
- Chemical goggles.

Skin protection

See Hand protection below

- Wear chemical protective gloves, e.g. PVC.Wear safety footwear or safety gumboots, e.g. Rubber
- NOTE:

Hands/feet protection

The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Body protection

See Other protection below

Other protection

- Employees working with confirmed human carcinogens should be provided with, and be required to wear, clean, full body protective clothing (smocks, coveralls, or long-sleeved shirt and pants), shoe covers and gloves prior to entering the regulated area. [AS/NZS ISO 6529:2006 or national equivalent]
- Employees engaged in handling operations involving carcinogens should be provided with, and required to wear and use half-face filter-type respirators with filters for dusts, mists and fumes, or air purifying canisters or cartridges.
- Prior to each exit from an area containing confirmed human carcinogens, employees should be required to remove and leave protective clothing and equipment at the point of exit and at the last exit of the day, to place used clothing and equipment in impervious containers at the point of exit for purposes of decontamination or disposal. The contents of such impervious containers must be identified with suitable labels.
- Overalls.
- PVC Apron.
- Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.
- ▶ For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets).

Respiratory protection

Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties Appearance Not Available Physical state Liquid Relative density (Water = 1) Not Available

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| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
|--|---------------|---|---------------|
| Odour threshold | Not Available | Auto-ignition temperature (°C) | Not Available |
| pH (as supplied) | Not Available | Decomposition temperature | Not Available |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | Not Available |
| Initial boiling point and boiling range (°C) | Not Available | Molecular weight (g/mol) | Not Available |
| Flash point (°C) | 40.56 | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | Flammable. | Oxidising properties | Not Available |
| Upper Explosive Limit (%) | Not Available | Surface Tension (dyn/cm or mN/m) | Not Available |
| Lower Explosive Limit (%) | Not Available | Volatile Component (%vol) | Not Available |
| Vapour pressure (kPa) | Not Available | Gas group | Not Available |
| Solubility in water | Immiscible | pH as a solution (%) | Not Available |
| Vapour density (Air = 1) | Not Available | VOC g/L | Not Available |

SECTION 10 Stability and reactivity

| Reactivity | See section 7 |
|------------------------------------|--|
| Chemical stability | Unstable in the presence of incompatible materials. Product is considered stable. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |
| Incompatible materials | See section 7 |
| Hazardous decomposition products | See section 5 |

SECTION 11 Toxicological information

Information on toxicological effects

The material is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.

Inhaled

Inhaling high concentrations of mixed hydrocarbons can cause narcosis, with nausea, vomiting and lightheadedness. Low molecular weight (C2-C12) hydrocarbons can irritate mucous membranes and cause incoordination, giddiness, nausea, vertigo, confusion, headache, appetite

Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and

Headache, fatigue, tiredness, irritability and digestive disturbances (nausea, loss of appetite and bloating) are the most common symptoms of xylene overexposure. Injury to the heart, liver, kidneys and nervous system has also been noted amongst workers. Xylene is a central nervous system depressant

Ingestion

Skin Contact

Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733)

Accidental ingestion of the material may be damaging to the health of the individual.

Nonionic surfactants may produce localised irritation of the oral or gastrointestinal lining and induce vomiting and mild diarrhoea. Ingestion of petroleum hydrocarbons can irritate the pharynx, oesophagus, stomach and small intestine, and cause swellings and ulcers of the mucous. Symptoms include a burning mouth and throat; larger amounts can cause nausea and vomiting, narcosis, weakness, dizziness, slow and shallow breathing, abdominal swelling, unconsciousness and convulsions.

This material can cause inflammation of the skin on contact in some persons.

The material may accentuate any pre-existing dermatitis condition

Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. Non-ionic surfactants cause less irritation than other surfactants as they have less ability to denature protein in the skin.

Open cuts, abraded or irritated skin should not be exposed to this material

Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

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If applied to the eyes, this material causes severe eye damage.

Non-ionic surfactants can cause numbing of the cornea, which masks discomfort normally caused by other agents and leads to corneal injury. Eve Irritation varies depending on the duration of contact, the nature and concentration of the surfactant. Direct eye contact with petroleum hydrocarbons can be painful, and the corneal epithelium may be temporarily damaged. Aromatic species can cause irritation and excessive tear secretion. Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. There is sufficient evidence to suggest that this material directly causes cancer in humans. Ample evidence exists from experimentation that reduced human fertility is directly caused by exposure to the material. Constant or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss Chronic and anaemia, and reduced liver and kidney function. Skin exposure may result in drying and cracking and redness of the skin. Prolonged or repeated skin contact may cause degreasing, followed by drying, cracking and skin inflammation. Women exposed to xylene in the first 3 months of pregnancy showed a slightly increased risk of miscarriage and birth defects. Evaluation of workers chronically exposed to xylene has demonstrated lack of genetic toxicity. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. TOXICITY IRRITATION **Duralux Marine Enamel Signal** Orange - M733 Not Available Not Available TOXICITY IRRITATION Dermal (rabbit) LD50: >1700 $mg/kg^{[2]}$ Eye (human): 200 ppm irritant Inhalation(Rat) LC50; 5922 ppm4h^[1] Eye (rabbit): 5 mg/24h SEVERE xylene Oral(Mouse) LD50; 2119 mg/kg^[2] Eye (rabbit): 87 mg mild Eye: adverse effect observed (irritating)^[1] Skin (rabbit):500 mg/24h moderate Skin: adverse effect observed (irritating)^[1] TOXICITY IRRITATION Dermal (rabbit) LD50: >5000 mg/kg^[2] Eye (rabbit): 500 mg - SEVERE Inhalation(Rat) LC50; 17.2 mg/l4h^[2] Eye: no adverse effect observed (not irritating)^[1] ethylbenzene Oral(Rat) LD50; ~3523 mg/kg^[2] Skin (rabbit): 15 mg/24h mild Skin: no adverse effect observed (not irritating) $^{[1]}$ TOXICITY IRRITATION Dermal (rabbit) LD50: >2000 mg/kg^[2] Eye: Not irritating (OECD 405) * C14-20 aliphatics (<=2% Inhalation(Rat) LC50; 4.6 mg/l4h^[2] Eye: no adverse effect observed (not irritating)^[1] aromatics) Oral(Rat) LD50; 7400 mg/kg[2] Skin: Not irritating (OECD 404)* Skin: adverse effect observed (irritating) [1]TOXICITY IRRITATION Eye: no adverse effect observed (not irritating) $^{[1]}$ Dermal (rabbit) LD50: >2000 mg/kg^[2] distillates, petroleum, light, hydrotreated Inhalation(Rat) LC50; >4.3 mg/l4h[1] Skin: adverse effect observed (irritating)^[1] Oral(Rat) LD50; >5000 mg/kg[2] TOXICITY IRRITATION Dermal (rabbit) LD50: >2000 mg/kg^[1] Eye: Severe nonylphenol ethoxylate, Oral(Rat) LD50; >2000 mg/kg[1] Eye: no adverse effect observed (not irritating)^[1] branched Skin: Severe Skin: no adverse effect observed (not irritating)^[1] dermal (hamster) LD50: >=10000 mg/kg[2] Eye: no adverse effect observed (not irritating)^[1] **Titanium Dioxide Ti02** Inhalation(Rat) LC50; >2.28 mg/l4h[1] Skin: no adverse effect observed (not irritating)^[1] Oral(Rat) LD50; >=2000 mg/kg $^{[1]}$ TOXICITY IRRITATION zirconium 2-ethylhexanoate dermal (rat) LD50: >2000 mg/kg[1] Not Available

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Inhalation(Rat) LC50; >4.3 mg/l4h^[1] Oral(Rat) LD50; 2043 mg/kg^[1] IRRITATION TOXICITY Eve (rabbit): 0.1 ml - SEVERE Dermal (rabbit) LD50: >184<1840 mg/kg^[1] methyl ethyl ketoxime Inhalation(Rat) LC50; >4.83 mg/l4h[1] Oral(Rat) LD50: >900 mg/kg[1] 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise Legend: specified data extracted from RTECS - Register of Toxic Effect of chemical Substances Reproductive effector in rats The substance is classified by IARC as Group 3: **XYLENE** NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. Liver changes, utheral tract, effects on fertility, foetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded. Ethylbenzene is readily absorbed when inhaled, swallowed or in contact with the skin. It is distributed throughout the body, and passed out through urine **ETHYLBENZENE** NOTE: Substance has been shown to be mutagenic in at least one assay, or belongs to a family of chemicals producing damage or change to WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans. C14-20 ALIPHATICS (<=2% *Exxsol D 100 SDS AROMATICS) For nonylphenol and its compounds: Alkylphenols like nonylphenol and bisphenol A have estrogenic effects in the body. They are known as xenoestrogens. Polyethers (such as ethoxylated surfactants and polyethylene glycols) are highly susceptible to being oxidized in the air. They then form complex mixtures of oxidation products. Animal testing reveals that whole the pure, non-oxidised surfactant is non-sensitizing, many of the oxidation products are sensitisers. Humans have regular contact with alcohol ethoxylates through a variety of industrial and consumer products such as soaps, detergents and other NONYLPHENOL cleaning products. Exposure to these chemicals can occur through swallowing, inhalation, or contact with the skin or eyes. ETHOXYLATE, BRANCHED Both laboratory and animal testing has shown that there is no evidence for alcohol ethoxylates (AEs) causing genetic damage, mutations or cancer. No adverse reproductive or developmental effects were observed Tri-ethylene glycol ethers undergo enzymatic oxidation to toxic alkoxy acids. They may irritate the skin and the eyes. Animal testing suggests that repeated exposure to nonylphenol may cause liver changes and kidney dysfunction. Nonylphenol was not found to cause mutations or chromosomal aberrations. For aliphatic fatty acids (and salts) Acute oral (gavage) toxicity: The acute oral LD50 values in rats for both were greater than >2000 mg/kg bw Clinical signs were generally associated with poor condition following administration of high doses (salivation, diarrhoea, staining, piloerection and lethargy). There were no adverse effects on body weight in any study In some studies, excess test substance and/or irritation in the gastrointestinal tract was observed at necropsy. Skin and eye irritation potential, with a few stated exceptions, is chain length dependent and decreases with increasing chain length ZIRCONILIM According to several OECD test regimes the animal skin irritation studies indicate that the C6-10 aliphatic acids are severely irritating or 2-ETHYLHEXANOATE corrosive, while the C12 aliphatic acid is irritating, and the C14-22 aliphatic acids generally are not irritating or mildly irritating. Human skin irritation studies using more realistic exposures (30-minute.1-hour or 24-hours) indicate that the aliohatic acids have sufficient. good or very good skin compatibility. Animal eye irritation studies indicate that among the aliphatic acids, the C8-12 aliphatic acids are irritating to the eye while the C14-22 aliphatic acids are not irritating. Fatty acid salts of low acute toxicity. Their potential to irritate the skin and eyes is dependent on chain length. Mammalian lymphocyte mutagen *Huls Canada ** Merck METHYL ETHYL KETOXIME For methyl ethyl ketoxime (MEKO): At medium to high concentrations, MEKO increased the rate of liver tumours in animal testing. This seems to be due to the breakdown of MEKO into a cancer-causing substance, and occurred more often in males. **Duralux Marine Enamel Signal** The following information refers to contact allergens as a group and may not be specific to this product. Orange - M733 & METHYL Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact ETHYL KETOXIME eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. **Duralux Marine Enamel Signal** Orange - M733 & C14-20 Animal studies indicate that normal, branched and cyclic paraffins are absorbed from the gastrointestinal tract and that the absorption of ALIPHATICS (<=2% n-paraffins is inversely proportional to the carbon chain length, with little absorption above C30. With respect to the carbon chain lengths likely to AROMATICS) & DISTILLATES, be present in mineral oil, n-paraffins may be absorbed to a greater extent than iso- or cyclo-paraffins. PETROLEUM, LIGHT, The major classes of hydrocarbons are well absorbed into the gastrointestinal tract in various species. **HYDROTREATED Duralux Marine Enamel Signal** Orange - M733 & Kerosene may produce varying ranges of skin irritation, and a reversible eye irritation (if eyes are washed). Skin may be cracked or flaky and/or DISTILLATES, PETROLEUM, leathery, with crusts and/or hair loss. LIGHT, HYDROTREATED The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. **XYLENE & ETHYLBENZENE** The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin DISTILLATES, PETROLEUM, **LIGHT, HYDROTREATED &** No significant acute toxicological data identified in literature search. ZIRCONIUM 2-ETHYLHEXANOATE

Carcinogenicity

Acute Toxicity

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| Skin Irritation/Corrosion | ✓ | Reproductivity | ✓ |
|-----------------------------------|----------|--------------------------|----------|
| Serious Eye Damage/Irritation | ✓ | STOT - Single Exposure | ✓ |
| Respiratory or Skin sensitisation | ✓ | STOT - Repeated Exposure | × |
| Mutagenicity | × | Aspiration Hazard | ~ |

Legend:

X − Data either not available or does not fill the criteria for classification
✓ − Data available to make classification

SECTION 12 Ecological information

EC50

72h

| ıο | ΧI | C | |
|----|----|---|--|
| | | | |

| | Endpoint | Test Duration | (hr) | Species | | Value | | Source | |
|--|---------------|---------------------|------------------|-----------------------------|-------------|-----------|--------------------|--------|--------|
| ıralux Marine Enamel Signal Orange - M733 | Not Available | Not Available | i (iii <i>)</i> | Not Available Not Available | | | Not Available | | |
| | | | | | | | | | |
| | Endpoint | Test Duration (h | r) | Species | | | Value |) | Source |
| | EC50 | 72h | , | Algae or other aqua | atic plants | | 4.6mg | g/l | 2 |
| xylene | LC50 | 96h | | Fish | | | 2.6mg | g/l | 2 |
| | EC50 | 48h | | Crustacea | | | 1.8mg | | 2 |
| | NOEC(ECx) | 73h | | Algae or other aqua | atic plants | | 0.44n | | 2 |
| | , , | | | | | | | | |
| | Endneint | Took Direction (br) | en. | aiaa | | Vali | | | Source |
| | Endpoint | Test Duration (hr) | | cies | 1 | | | | |
| | EC50 | 72h | | e or other aquatic p | iants | 4.6r | | /1 | 1 |
| ethylbenzene | LC50 | 96h | Fish | | | | 31-4.075mg | /L | 4 |
| | EC50 | 48h | | stacea | | | 7-4.4mg/l | | 4 |
| | NOEC(ECx) | 720h | Fish | | l | | 31mg/L | | 4 |
| | EC50 | 96h | Alga | e or other aquatic p | iants | 3.6r | ng/i | | 2 |
| | | | | | | | | | |
| C14-20 aliphatics (<=2% | Endpoint | Test Duration (h | r) | Species | | Value | | Source | |
| aromatics) | NOEC(ECx) | 72h | | Algae or other aqua | tic plants | | <0.03m | ıg/l | 1 |
| | NOEC(ECx) | 3072h | | Fish | | | 1mg/l | | 1 |
| | | | | | | | | | |
| distillates, petroleum, light, hydrotreated | Endpoint | Test Duration (hr) | | Species | | , | Value | Sou | ırce |
| | NOEC(ECx) | 3072h Fish | | | 1mg/l | 1 | | | |
| | | | | | | | | | |
| | Endpoint | Test Duration (h | r) | Species | | | Value | | Source |
| nonylphenol ethoxylate, | NOEC(ECx) | 2184h | | Fish | | | 0.006m | ıg/l | 2 |
| branched | EC50 | 72h | | Algae or other aqua | itic plants | | >3mg/l | | 2 |
| | LC50 | 96h | | Fish | | | 0.136m | ıg/l | 2 |
| | , | ' | | | | | | | |
| | Endpoint | Test Duration (hr |) S _i | pecies | | | Value | | Source |
| | EC50 | 72h | Al | gae or other aquatic | plants | : | 3.75-7.58m | g/l | 4 |
| | BCF | 1008h | Fi | sh | | | <1.1-9.6 | | 7 |
| Titanium Dioxide Ti02 | EC50 | 48h | C | rustacea | | | 1.9mg/l | | 2 |
| | LC50 | 96h | Fi | sh | | 1.85-3.06 | | g/l | 4 |
| | NOEC(ECx) | 504h | C | rustacea | | | 0.02mg/l | | 4 |
| | EC50 | 96h | Al | gae or other aquatic | plants | | 179.05mg/l | | |
| | , | ' | | | | | | | |
| | Endpoint | Test Duration (hr) | | Species | | | Value | | Source |
| | EC50(ECx) | 48h | | Crustacea | | | >0.17m | a/I | 2 |
| zirconium 2-ethylhexanoate | EC50(ECX) | 72h | | Algae or other aquat | ic plante | | 49.3mg | | 2 |
| 2 Somani 2-Gurymexanoate | EC50 | 48h | | Prustacea | ιο ριαιτιο | | >0.17m | | 2 |
| | LC50 | 96h | | Fish | | | >0.17111 >100mg | | 2 |
| | 2030 | 3011 | | 1011 | | | > 100ili(| g/ 1 | |
| | | | | | | | | | |
| | Endpoint | Test Duration (h | r) | Species | | | Value | | Source |
| methyl ethyl ketoxime | BCF | 1008h | | Fish | | | 0.5-0.6 | | 7 |
| metnyi etnyi ketoxime | NOEC(ECx) | 72h | | Algae or other aqua | | | ~1.02m | | 2 |

Algae or other aquatic plants

2

~6.09mg/l

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 LC50
 96h
 Fish
 >100mg/l
 2

 EC50
 48h
 Crustacea
 ~201mg/l
 2

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

When spilled this product may act as a typical oil, causing a film, sheen, emulsion or sludge at or beneath the surface of the body of water. The oil film on water surface may physically affect the aquatic organisms, due to the interruption of the

oxygen transfer between the air and the water

Oils of any kind can cause:

- b drowning of water-fowl due to lack of buoyancy, loss of insulating capacity of feathers, starvation and vulnerability to predators due to lack of mobility
- lethal effects on fish by coating gill surfaces, preventing respiration
- asphyxiation of benthic life forms when floating masses become engaged with surface debris and settle on the bottom and
- ▶ adverse aesthetic effects of fouled shoreline and beaches

In case of accidental releases on the soil, a fine film is formed on the soil, which prevents the plant respiration process and the soil particle saturation.

For Aromatic Substances Series:

Environmental Fate: Large, molecularly complex polycyclic aromatic hydrocarbons, or PAHs, are persistent in the environment longer than smaller PAHs.

Atmospheric Fate: PAHs are 'semi-volatile substances' which can move between the atmosphere and the Earth's surface in repeated, temperature-driven cycles of deposition and volatilization.

For petroleum distillates:

Environmental fate:

When petroleum substances are released into the environment, four major fate processes will take place: dissolution in water, volatilization, biodegradation and adsorption. These processes will cause changes in the composition of these UVCB substances.

For Xylenes:

 $log\ Koc: 2.05-3.08;\ Koc: 25.4-204;\ Half-life\ (hr)\ air: 0.24-42;\ Half-life\ (hr)\ H2O\ surface\ water: 24-672;\ Half-life\ (hr)\ H2O\ ground: 336-8640;\ Half-life\ (hr)\ soil: 52-672;\ Henry's\ Pa\ m3\ /mol: 637-879;\ Henry's\ atm\ m3\ /mol - 7.68E-03;\ BOD\ 5\ if\ unstated: -1.4,1%;\ COD\ - 2.56,13%\ ThOD\ - 3.125:\ BCF: 23;\ log\ BCF: 1.17-2.41.$

Environmental Fate: Most xylenes released to the environment will occur in the atmosphere and volatilisation is the dominant environmental fate process.

For Surfactants: Kow cannot be easily determined due to hydrophilic/hydrophobic properties of the molecules in surfactants. BCF value: 1-350.

For Alkylphenols and their Ethoxylates, or Propoxylates (APE):

Environmental fate: Alkylphenols are found everywhere in the environmental, when released. Releases are generally as wastes; they are extensively used throughout industry and in the home.

DO NOT discharge into sewer or waterways

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|-----------------------|-----------------------------|-----------------------------|
| xylene | HIGH (Half-life = 360 days) | LOW (Half-life = 1.83 days) |
| ethylbenzene | HIGH (Half-life = 228 days) | LOW (Half-life = 3.57 days) |
| Titanium Dioxide Ti02 | HIGH | HIGH |
| methyl ethyl ketoxime | LOW | LOW |

Bioaccumulative potential

| • | |
|---|--------------------|
| Ingredient | Bioaccumulation |
| xylene | MEDIUM (BCF = 740) |
| ethylbenzene | LOW (BCF = 79.43) |
| C14-20 aliphatics (<=2% aromatics) | LOW (BCF = 159) |
| distillates, petroleum, light, hydrotreated | LOW (BCF = 159) |
| Titanium Dioxide Ti02 | LOW (BCF = 10) |
| methyl ethyl ketoxime | LOW (BCF = 5.8) |

Mobility in soil

| • | |
|-----------------------|-------------------|
| Ingredient | Mobility |
| ethylbenzene | LOW (KOC = 517.8) |
| Titanium Dioxide Ti02 | LOW (KOC = 23.74) |
| methyl ethyl ketoxime | LOW (KOC = 130.8) |

SECTION 13 Disposal considerations

Waste treatment methods

- Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area

Product / Packaging disposal

- area.

 DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.

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SECTION 14 Transport information

Labels Required



Marine Pollutant NO

Land transport (DOT)

| UN number | 1263 | |
|------------------------------|--|--|
| UN proper shipping name | Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base | |
| Transport hazard class(es) | Class 3 Subrisk Not Applicable | |
| Packing group | III | |
| Environmental hazard | Not Applicable | |
| Special precautions for user | Hazard Label 3 | |

Air transport (ICAO-IATA / DGR)

| UN number | 1263 | 1263 | | |
|------------------------------|--|--|--|--|
| UN proper shipping name | Paint (including paint, lac | Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) | | |
| Transport hazard class(es) | ICAO/IATA Class ICAO / IATA Subrisk ERG Code | 3 Not Applicable 3L | | |
| Packing group | III | | | |
| Environmental hazard | Not Applicable | | | |
| Special precautions for user | | Qty / Pack Packing Instructions | A3 A72 A192 366 220 L 355 60 L Y344 10 L | |

Sea transport (IMDG-Code / GGVSee)

| UN number | 1263 | | |
|------------------------------|--|--|--|
| UN proper shipping name | | PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound) | |
| Transport hazard class(es) | IMDG Class 3 IMDG Subrisk No | ot Applicable | |
| Packing group | Ш | | |
| Environmental hazard | Not Applicable | | |
| Special precautions for user | EMS Number Special provisions Limited Quantities | F-E , S-E 163 223 367 955 5 L | |

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

| Product name | Group |
|------------------------------------|---------------|
| xylene | Not Available |
| ethylbenzene | Not Available |
| C14-20 aliphatics (<=2% aromatics) | Not Available |

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| Product name | Group |
|---|---------------|
| distillates, petroleum, light, hydrotreated | Not Available |
| nonylphenol ethoxylate, branched | Not Available |
| Titanium Dioxide Ti02 | Not Available |
| zirconium 2-ethylhexanoate | Not Available |
| methyl ethyl ketoxime | Not Available |

Transport in bulk in accordance with the ICG Code

| Product name | Ship Type |
|---|---------------|
| xylene | Not Available |
| ethylbenzene | Not Available |
| C14-20 aliphatics (<=2% aromatics) | Not Available |
| distillates, petroleum, light, hydrotreated | Not Available |
| nonylphenol ethoxylate, branched | Not Available |
| Titanium Dioxide Ti02 | Not Available |
| zirconium 2-ethylhexanoate | Not Available |
| methyl ethyl ketoxime | Not Available |

SECTION 15 Regulatory information

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

xylene is found on the following regulatory lists

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

US - California Hazardous Air Pollutants Identified as Toxic Air Contaminants

US - Massachusetts - Right To Know Listed Chemicals

US ACGIH Threshold Limit Values (TLV)

US ACGIH Threshold Limit Values (TLV) - Carcinogens

US ACGIH Threshold Limit Values (TLV) - Notice of Intended Changes

US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)

US Clean Air Act - Hazardous Air Pollutants

US CWA (Clean Water Act) - List of Hazardous Substances

US DOE Temporary Emergency Exposure Limits (TEELs)

US EPA Integrated Risk Information System (IRIS)

US EPCRA Section 313 Chemical List

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory US TSCA Chemical Substance Inventory - Interim List of Active Substances

ethylbenzene is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans

US - California Hazardous Air Pollutants Identified as Toxic Air Contaminants

US - California Proposition 65 - Carcinogens

US - California Proposition 65 - No Significant Risk Levels (NSRLs) for Carcinogens

US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List

US - Massachusetts - Right To Know Listed Chemicals

US ACGIH Threshold Limit Values (TLV)

US ACGIH Threshold Limit Values (TLV) - Carcinogens

US ACGIH Threshold Limit Values (TLV) - Notice of Intended Changes

US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)

US Clean Air Act - Hazardous Air Pollutants

US CWA (Clean Water Act) - List of Hazardous Substances

US CWA (Clean Water Act) - Priority Pollutants

US CWA (Clean Water Act) - Toxic Pollutants

US DOE Temporary Emergency Exposure Limits (TEELs)

US EPA Integrated Risk Information System (IRIS)

US EPCRA Section 313 Chemical List

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

C14-20 aliphatics (<=2% aromatics) is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

US ACGIH Threshold Limit Values (TLV)

US ACGIH Threshold Limit Values (TLV) - Carcinogens

distillates, petroleum, light, hydrotreated is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans

US - California Proposition 65 - Carcinogens

US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List

US ACGIH Threshold Limit Values (TLV)

US DOE Temporary Emergency Exposure Limits (TEELs)

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

US ACGIH Threshold Limit Values (TLV) - Carcinogens

US DOE Temporary Emergency Exposure Limits (TEELs)

US National Toxicology Program (NTP) 14th Report Part A Known to be Human Carcinogens

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

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Chemical Footprint Project - Chemicals of High Concern List

US DOE Temporary Emergency Exposure Limits (TEELs)

US EPCRA Section 313 Chemical List

Titanium Dioxide Ti02 is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

US - California Proposition 65 - Carcinogens

US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List

US - Massachusetts - Right To Know Listed Chemicals

US ACGIH Threshold Limit Values (TLV)

US ACGIH Threshold Limit Values (TLV) - Carcinogens

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory US TSCA Chemical Substance Inventory - Interim List of Active Substances

US ACGIH Threshold Limit Values (TLV) - Notice of Intended Changes

US DOE Temporary Emergency Exposure Limits (TEELs)

US List of Active Substances Exempt from the TSCA Inventory Notifications (Active-Inactive) Rule

US NIOSH Carcinogen List

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US OSHA Permissible Exposure Limits (PELs) Table Z-3

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

zirconium 2-ethylhexanoate is found on the following regulatory lists

US ACGIH Threshold Limit Values (TLV)

US ACGIH Threshold Limit Values (TLV) - Carcinogens

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Permissible Exposure Limits (PELs) Table Z-1

2 A COULT Throughold Elimic Values (TEV)

03 OSHA Fermissible Exposure Limits (FELS) Table 2-1

methyl ethyl ketoxime is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

US AIHA Workplace Environmental Exposure Levels (WEELs)
US DOE Temporary Emergency Exposure Limits (TEELs)

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US OSHA Permissible Exposure Limits (PELs) Table Z-3

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory US TSCA Chemical Substance Inventory - Interim List of Active Substances

US Toxicology Excellence for Risk Assessment (TERA) Workplace Environmental Exposure Levels (WEEL)

US TSCA Chemical Substance Inventory - Interim List of Active Substances US TSCA Section 4/12 (b) - Sunset Dates/Status

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 hazard categories

| Flammable (Gases, Aerosols, Liquids, or Solids) | Yes |
|--|-----|
| Gas under pressure | No |
| Explosive | No |
| Self-heating | No |
| Pyrophoric (Liquid or Solid) | No |
| Pyrophoric Gas | No |
| Corrosive to metal | No |
| Oxidizer (Liquid, Solid or Gas) | No |
| Organic Peroxide | No |
| Self-reactive Self-reactive | No |
| In contact with water emits flammable gas | No |
| Combustible Dust | No |
| Carcinogenicity | Yes |
| Acute toxicity (any route of exposure) | No |
| Reproductive toxicity | Yes |
| Skin Corrosion or Irritation | Yes |
| Respiratory or Skin Sensitization | Yes |
| Serious eye damage or eye irritation | Yes |
| Specific target organ toxicity (single or repeated exposure) | Yes |
| Aspiration Hazard | Yes |
| Germ cell mutagenicity | No |
| Simple Asphyxiant | No |
| Hazards Not Otherwise Classified | No |

US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

| Name | Reportable Quantity in Pounds (lb) | Reportable Quantity in kg |
|--------------|------------------------------------|---------------------------|
| xylene | 100 | 45.4 |
| ethylbenzene | 1000 | 454 |

State Regulations

US. California Proposition 65



WARNING: This product can expose you to chemicals including ethylbenzene, distillates, petroleum, light, hydrotreated, Titanium Dioxide Ti02, which are known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

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Duralux Marine Enamel Signal Orange - M733

Print Date: 10/18/2021

National Inventory Status

| National Inventory | Status | | |
|--|---|--|--|
| Australia - AIIC / Australia Non-Industrial Use | Yes | | |
| Canada - DSL | Yes | | |
| Canada - NDSL | No (xylene; ethylbenzene; C14-20 aliphatics (<=2% aromatics); distillates, petroleum, light, hydrotreated; nonylphenol ethoxylate, branched; titanium dioxide ti02; zirconium 2-ethylhexanoate; methyl ethyl ketoxime) aromatics);=" distillates,=" petroleum,=" light,=" hydrotreated;=" nonylphenol=" ethoxylate,=" branched;=" titanium=" dioxide=" ti02;=" zirconium=" 2-ethylhexanoate;=" methyl=" ethyl=" > | | |
| China - IECSC | Yes | | |
| Europe - EINEC / ELINCS / NLP | Yes | | |
| Japan - ENCS | res | | |
| Korea - KECI | Yes | | |
| New Zealand - NZIoC | Yes | | |
| Philippines - PICCS | Yes | | |
| USA - TSCA | Yes | | |
| Taiwan - TCSI | Yes | | |
| Mexico - INSQ | No (zirconium 2-ethylhexanoate) | | |
| Vietnam - NCI | Yes | | |
| Russia - FBEPH | Yes | | |
| Legend: | Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration. | | |

SECTION 16 Other information

| Revision Date | 10/15/2021 |
|---------------|------------|
| Initial Date | 10/16/2021 |

CONTACT POINT

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit $_{\circ}$

IDLH: Immediately Dangerous to Life or Health Concentrations

ES: Exposure Standard

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value

LOD: Limit Of Detection OTV: Odour Threshold Value

BCF: BioConcentration Factors

BEI: Biological Exposure Index

AIIC: Australian Inventory of Industrial Chemicals

DSL: Domestic Substances List NDSL: Non-Domestic Substances List

IECSC: Inventory of Existing Chemical Substance in China

EINECS: European INventory of Existing Commercial chemical Substances

ELINCS: European List of Notified Chemical Substances

NLP: No-Longer Polymers

ENCS: Existing and New Chemical Substances Inventory

KECI: Korea Existing Chemicals Inventory

NZIoC: New Zealand Inventory of Chemicals

PICCS: Philippine Inventory of Chemicals and Chemical Substances

TSCA: Toxic Substances Control Act

TCSI: Taiwan Chemical Substance Inventory

INSQ: Inventario Nacional de Sustancias Químicas

NCI: National Chemical Inventory

FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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^{**}PLEASE NOTE THAT TITANIUM DIOXIDE IS NOT PRESENT IN CLEAR OR NEUTRAL BASES**