# **SAFETY DATA SHEET**



Date of issue/Date of revision19 February 2024Version 21

Section 1. Identification	
Product name	: BRIGHT RED
Product code	: 104L
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses of	the substance or mixture and uses advised against
Product use	: Industrial applications.
Use of the substance/ mixture	: Coating. Paints. Painting-related materials.
Uses advised against	: Not applicable.
Manufacturer <u>Emergency telephone</u> <u>number</u>	<ul> <li>PPG Industries, Inc. One PPG Place, Pittsburgh, PA 15272</li> <li>(412) 434-4515 (U.S.) (514) 645-1320 (Canada) SETIQ Interior de la República: 800-00-214-00 (México)</li> </ul>
Technical Phone Number	SETIQ Ciudad de México: (55) 5559-1588 (México) : 1-800-647-6050

## Section 2. Hazards identification

OSHA/HCS status	<ul> <li>This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).</li> </ul>
<b>Classification of the</b>	: FLAMMABLE LIQUIDS - Category 3
substance or mixture	ACUTE TOXICITY (inhalation) - Category 4
	EYE IRRITATION - Category 2A
	SKIN SENSITIZATION - Category 1
	CARCINOGENICITY - Category 1B
	TOXIC TO REPRODUCTION - Category 1B
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
	Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 51.5% (oral), 86.2% (dermal), 95.5% (inhalation)
GHS label elements	
Hazard pictograms	
	$\langle \langle \langle \rangle \rangle \langle \langle \rangle \rangle \langle \langle \rangle \rangle \rangle$
	$\mathbf{v}$ $\mathbf{v}$ $\mathbf{v}$

Product name BRIGHT RED

## Section 2. Hazards identification

Signal word	: Danger
Hazard statements	<ul> <li>Flammable liquid and vapor. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS))</li> </ul>
Precautionary statements	
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
Response	: IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	: Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated. DANGER - RAGS, STEEL WOOL OR WASTE SOAKED WITH THIS PRODUCT MAY SPONTANEOUSLY CATCH FIRE IF IMPROPERLY DISCARDED. IMMEDIATELY AFTER EACH USE, PLACE RAGS, STEEL WOOL OR WASTE IN A SEALED WATER-FILLED METAL CONTAINER.
Hazards not otherwise classified	: Prolonged or repeated contact may dry skin and cause irritation.

Product name BRIGHT RED

### Section 3. Composition/information on ingredients

#### Substance/mixture Product name

: Mixture

: BRIGHT RED

Ingredient name	%	CAS number
Stoddard solvent	≥10 - ≤20	8052-41-3
Naphtha (petroleum), hydrotreated heavy	≥5.0 - ≤10	64742-48-9
Distillates (petroleum), hydrotreated light	≥5.0 - ≤10	64742-47-8
xylene	≥0.10 - ≤2.4	1330-20-7
manganese, 4-[(4-chloro-5-methyl-2-sulfophenyl)azo]-3-hydroxy-	≥1.0 - ≤5.0	12238-31-2
2-naphthalenecarboxylic acid complex		
calcium bis(2-ethylhexanoate)	<1.0	136-51-6
cobalt bis(2-ethylhexanoate)	<1.0	136-52-7
2-ethylhexanoic acid, zirconium salt	≤1.0	22464-99-9
ethylbenzene	<1.0	100-41-4
2-butanone oxime	<1.0	96-29-7

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

### Description of necessary first aid measures

Eye contact	: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Inhalation	<ul> <li>Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.</li> </ul>
Skin contact	<ul> <li>Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.</li> </ul>
Ingestion	: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

#### Most important symptoms/effects, acute and delayed

 Potential acute health effects

 Eye contact
 : Causes serious eye irritation.

 Inhalation
 : Harmful if inhaled.

 Skin contact
 : Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.

 Ingestion
 : No known significant effects or critical hazards.

 Over-exposure signs/symptoms

United States Page: 3/18

Product name BRIGHT RED

## Section 4. First aid measures

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Indication of immediate med	dical attention and special treatment needed, if necessary
Notes to physician	<ul> <li>In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</li> </ul>
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

### Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Fammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Product name BRIGHT RED

## Section 5. Fire-fighting measures

Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
Methods and materials for co	entainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Product name BRIGHT RED

### Section 7. Handling and storage

### Precautions for safe handling

Protective measures	: Fut on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Special precautions	: Ingestion of product or cured coating may be harmful. 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 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. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	: Do not store below the following temperature: 5°C (41°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### <u>Control parameters</u> <u>Occupational exposure limits</u>

Product name BRIGHT RED

## Section 8. Exposure controls/personal protection

TWA: 525 mg/m³ 8 hours.TWA: 100 ppm 8 hours.OSHA PEL (United States, 5/2018).TWA: 2900 mg/m³ 8 hours.TWA: 2900 mg/m³ 8 hours.TWA: 500 ppm 8 hours.None.Distillates (petroleum), hydrotreated lightACGIH TLV (United States, 1/2023).[Kerosene as total hydrocarbon vapor]Absorbed through skin.TWA: 200 mg/m³, (as total hydrocarbon vapor]Absorbed through skin.TWA: 200 mg/m³, (as total hydrocarbon vapor) 8 hours.OSHA PEL (United States, 5/2018).[Xylenes (o-, m-, p-isomers)]TWA: 435 mg/m³ 8 hours.TWA: 100 ppm 8 hours.ACGIH TLV (United States, 1/2023). [p-	Ingredient name	Exposure limits
Naphtha (petroleum), hydrotreated heavy       OHA PEL (United States, 5/2018).         TWA: 100 ppm 8 hours.       TWA: 500 ppm 8 hours.         Distiliates (petroleum), hydrotreated light       None.         xylene       ACGIH TLV (United States, 5/2018).         xylene       None.         xylene       OSHA PEL (United States, 5/2018).         (Kylenes (o, m, p-isomers)]       TWA: 435 mg/m², (as total hydrocarbon vapol)         Absorbed through skin.       TWA: 435 mg/m², (as total hydrocarbon vapol)         Absorbed through skin.       TWA: 435 mg/m², (as total hydrocarbon vapol)         Absorbed through skin.       TWA: 435 mg/m², (as total hydrocarbon vapol)         Absorbed through skin.       TWA: 435 mg/m², (as total hydrocarbon vapol)         Absorbed through skin.       TWA: 435 mg/m², (as total hydrocarbon vapol)         Absorbed through skin.       TWA: 435 mg/m², (as total hydrocarbon vapol)         Absorbed through skin.       TWA: 435 mg/m², (as total hydrocarbon vapol)         AcGIH TLV (United States, 5/2018).       [Kylenes (o, m, p-isomers)]         TWA: 435 mg/m², (as total hydrocarbon vapol)       Absorbed through skin.         Cotta tabsorbed through skin.       TWA: 435 mg/m², (as total hydrocarbon vapol)         Absorbed through skin.       TWA: 435 mg/m², (as total hydrocarbon vapol)         Cobtabsorbed through skin.       TWA:	Stoddard solvent	
Naphtha (petroleum), hydrotreated heavy       Distiliates (petroleum), hydrotreated light       TWA: 500 ppm 8 hours.         TWA: 500 ppm 8 hours.       None.         Naphtha (petroleum), hydrotreated light       None.         xylene       ACGIH TLV (United States, 1/2023).         Kerosen as total hydrocarbon vapo]         Absorbed through skin.         TWA: 200 mg/m³ (as total hydrocarbon vapor) & Absorbed through skin.         TWA: 200 mg/m³ (as total hydrocarbon vapor) & Absorbed through skin.         TWA: 200 mg/m³ (as total hydrocarbon vapor) & Bours.         OSHA PEL (United States, 5/2018).         Wylene (-4,-chloro-5-methyl-2-sulfophenyl)azo]-3-hydroxy-         2-naphthalenecarboxylic acid complex         2-naphthalenecarboxylic acid complex         Cell L: 5 mg/m³ (as Mn)         ACGIH TLV (United States, 5/2018).         [Manganese compounds (as Mn)]         CEll: 5 mg/m³ (as Mn)         ACGIH TLV (United States, 1/2023).         [Manganese and inorganic compounds (as Mn)]         Cell: 5 mg/m³ (as Mn) & hours. Form:         Inhalable fraction         None.         calcium bis(2-ethylhexanoate)         cobalt bis(2-ethylhexanoate)         cobalt bis(2-ethylhexanoate)         cobalt bis(2-ethylhexanoate)         cobalt bis(2-ethylhexanoate) <t< td=""><td></td><td>TWA: 525 mg/m<sup>3</sup> 8 hours.</td></t<>		TWA: 525 mg/m <sup>3</sup> 8 hours.
Naphtha (petroleum), hydrotreated heavy       TWA: 2900 mg/m <sup>2</sup> (as total hydrocarbon vapol]         Naphtha (petroleum), hydrotreated light       TWA: 500 ppm 8 hours.         xylene       ACGIH TLV (United States, 1/2023).         xylene       TWA: 200 mg/m <sup>2</sup> , (as total hydrocarbon vapol]         Absorbed through skin.       TWA: 200 mg/m <sup>2</sup> , (as total hydrocarbon vapol]         Absorbed through skin.       TWA: 435 mg/m <sup>2</sup> , (as total hydrocarbon vapol]         Absorbed through skin.       TWA: 435 mg/m <sup>2</sup> , (as total hydrocarbon vapol]         Mapol 8 hours.       OSHA PEL (United States, 5/2018).         (Zylenes (o-, m-, p-Isomers)]       TWA: 435 mg/m <sup>2</sup> 8 hours.         TWA: 20 ppm 8 hours.       TWA: 20 ppm 8 hours.         CHA: 20 ppm 8 hours.       TWA: 20 ppm 8 hours.         CHA: 20 ppm 8 hours.       TWA: 20 ppm 8 hours.         TWA: 20 ppm 8 hours.       TWA: 20 ppm 8 hours.         CHA: 20 ppm 8 hours.       TWA: 20 ppm 8 hours.         CHA: 20 ppm 8 hours.       TWA: 20 ppm 8 hours.         CHA: 20 ppm 8 hours.       TWA: 20 ppm 8 hours.         CHA: 20 ppm 8 hours.       TWA: 20 ppm 8 hours.         CHA: 20 ppm 8 hours.       TWA: 20 ppm 8 hours.         CHA: 20 ppm 8 hours.       TWA: 20 ppm 8 hours.         CHA: 20 ppm 8 hours.       TWA: 20 ppm 8 hours.         calcium bis(2		TWA: 100 ppm 8 hours.
Naphtha (petroleum), hydrotreated heavy         Distillates (petroleum), hydrotreated light         Xylene         Xylene         ACGIH TLV (United States, 1/2023).         (Kerosene as total hydrocarbon vapor)         Absorbed through skin.         TWA: 200 mg/m², (as total hydrocarbon vapor)         Absorbed through skin.         TWA: 200 mg/m², (as total hydrocarbon vapor)         Absorbed through skin.         TWA: 300 pg/m² (b hours.         OSHA PEL (United States, 5/2018).         (Xylene score, p-isomers)]         TWA: 300 pg/m² (b hours.         OSHA PEL (United States, 5/2018).         (None.         2-naphthalenecarboxylic acid complex         Calit Dis(2-ethylhexanoate)         colatt bis(2-ethylhexanoate)         col		OSHA PEL (United States, 5/2018).
Naphtha (petroleum), hydrotreated heavy         Distillates (petroleum), hydrotreated light         Xylene         Xylene         ACGIH TLV (United States, 1/2023).         (Kerosene as total hydrocarbon vapor)         Absorbed through skin.         TWA: 200 mg/m², (as total hydrocarbon vapor)         Absorbed through skin.         TWA: 200 mg/m², (as total hydrocarbon vapor)         Absorbed through skin.         TWA: 300 pg/m² (b hours.         OSHA PEL (United States, 5/2018).         (Xylene score, p-isomers)]         TWA: 300 pg/m² (b hours.         OSHA PEL (United States, 5/2018).         (None.         2-naphthalenecarboxylic acid complex         Calit Dis(2-ethylhexanoate)         colatt bis(2-ethylhexanoate)         col		TWA: 2900 mg/m <sup>3</sup> 8 hours.
Naphtha (petroleum), hydrotreated light       None.         ACGIH TLV (United States, 1/2023).         Kerosene as total hydrocarbon vapor]         Absorbed through skin.         TWA: 200 mg/m², (as total hydrocarbon vapor]         Absorbed through skin.         TWA: 200 mg/m², (as total hydrocarbon vapor]         Absorbed through skin.         TWA: 200 mg/m², (as total hydrocarbon vapor]         Absorbed through skin.         TWA: 200 mg/m², (as total hydrocarbon vapor]         Mark 100 ppm 8 hours.         Collect         TWA: 435 mg/m² b hours.         ACGIH TLV (United States, 1/2023). [p- xylene and mixtures containing p-xylene]         Ototoxicant.         TWA: 20 ppm 8 hours.         COHA PEL (United States, 1/2023).         Paraphthalenecarboxylic acid complex         Coll TLV (United States, 1/2023).         Coll TLV (United States, 1/2023).         Marganese and inorganic compounds (as Mn)]         CEL: 5 mg/m². (as Mn) 8 hours. Form:         Inhalable fraction         Coll TLV (United States, 1/2023). [coba and inorganic compounds as Co] Skin senitizer. Inhalation sensitizer.         Calcium bis(2-ethylhexanoate)         cobalt bis(2-ethylhexanoate)         cobalt bis(2-ethylhexanoate)         2-ethylhexanoic acid, zirconium salt		
Distillates (petroleum), hydrotreated light ACGIH TLV (United States, 1/2023), [Kerosene as total hydrocarbon vapor] Absorbed through skin. TWA: 200 mg/m², (as total hydrocarbon vapor) 8 hours. OSHA PEL (United States, 5/2018), [Xylenes (o, m, p-isomers)] TWA: 435 mg/m² 8 hours. ACGIH TLV (United States, 1/2023), [p- xylene and mixtures containing p-xylene] Ototoxicant. TWA: 200 pm 8 hours. OSHA PEL (United States, 1/2023), [p- xylene and mixtures containing p-xylene] Ototoxicant. TWA: 200 pm 8 hours. OSHA PEL (United States, 1/2023), [p- xylene and mixtures containing p-xylene] Ototoxicant. TWA: 20 pm 8 hours. OSHA PEL (United States, 1/2023), [m- maganese and inorganic compounds inhalable fraction / Respirable fraction, as Mn] TWA: 0.1 mg/m², (as Mn) 8 hours. Form: Inhalable fraction TWA: 0.02 mg/m², (as Mn) 8 hours. Form: Inhalable fraction TWA: 0.02 mg/m², (as Mn) 8 hours. Form: Inhalable fraction TWA: 0.02 mg/m², (as Co) 8 hours. 2-ethylhexanoic acid, zirconium salt ethylbenzene ethylbenzene ethylbenzene ACGIH TLV (United States, 1/2023), [Zirconium compounds as 2r] STEL: 10 mg/m², (as Zr) 8 hours. OSHA PEL (United States, 1/2023), [Zirconium compounds states, 1/2023), [Zirconium and compounds states, 1/2023), [Zirconium shours. OSHA PEL (United States, 1/2023), [Zirconium shours. OSHA PEL (United States, 5/2018), [Zirconium shours. OSHA PEL (United States, 5/201	Naphtha (petroleum), hydrotreated heavy	
(Kerosene as total hydrocarbon vapor]         Absorbed through skin.         TWA: 200 mg/m?, (as total hydrocarbon vapor)         Absorbed through skin.         TWA: 200 mg/m?, (as total hydrocarbon vapor)         Absorbed through skin.         TWA: 200 mg/m?, (as total hydrocarbon vapor)         Absorbed through skin.         TWA: 200 mg/m?, (as total hydrocarbon vapor)         SHA PEL (United States, 5/2018).         (Xylenes (o-, m., p-isomers)]         TWA: 405 mg/m? bhours.         TWA: 100 ppm 8 hours.         COSHA PEL (United States, 1/2023). [p-xylene and mixtures containing p-xylene]         Ototoxicant.         TWA: 20 ppm 8 hours.         CostA PEL (United States, 1/2023). [p-xylene and mixtures containing p-xylene]         Ototoxicant.         TWA: 20 ppm 8 hours.         CostA PEL (United States, 1/2023). [m.anganese compounds (as Mn)]         CELL: 5 mg/m², (as Mn) 8 hours. Form:         Inhalable fraction         TWA: 0.1 mg/m², (as Mn) 8 hours. Form:         Inhalable fraction         TWA: 0.2 mg/m², (as C) 8 hours.         cobalt bis(2-ethylhexanoate)         cobalt bis(2-ethylhexanoate)         2-ethylhexanoic acid, zirconium salt         2-ethylhexanoic acid, zirconium salt         2-ethylhexanoic acid, zirconium salt <td></td> <td></td>		
Absorbed through skin.         TWA: 200 mg/m³, (as total hydrocarbon vapor) 8 hours.         OSHA PEL (United States, 5/2018).         [Xylenes (o, m, p-isomers)]         TWA: 435 mg/m³ 8 hours.         TWA: 200 ppm 8 hours.         ACGIH TLV (United States, 1/2023). [p-xylene at mixtures containing p-xylene]         Ototoxicant.         TWA: 20 ppm 8 hours.         ACGIH TLV (United States, 1/2023). [p-xylene at mixtures containing p-xylene]         Ototoxicant.         TWA: 20 ppm 8 hours.         OSHA PEL (United States, 1/2023).         [Manganese compounds (as Mn)]         Cell: 5 mg/m³, (as Mn)         ACGIH TLV (United States, 1/2023).         [Manganese and inorganic compounds (as Mn)]         Cobalt bis(2-ethylhexanoate)         cobalt bis(2-ethylhexanoic acid, zirconium salt         2-ethylhexanoic acid, zirconium salt         Ethylbenzene         ethylbenzene         ethylbenzene         OSHA PEL (United States, 1/2023).		
<ul> <li>TWA: 200 mg/m<sup>3</sup>, (as total hydrocarbon vapor) 8 hours.</li> <li>OSHA PEL (United States, 5/2018).</li> <li>[Xylenes (or, m., p-isomers)]</li> <li>TWA: 435 mg/m<sup>3</sup> 8 hours.</li> <li>TWA: 435 mg/m<sup>3</sup> 8 hours.</li> <li>ACGIH TLV (United States, 1/2023). [p-xylene and mixtures containing p-xylene]</li> <li>Ototoxicant.</li> <li>TWA: 200 mg/m<sup>3</sup>, (as Mn)</li> <li>CEL: 5 mg/m<sup>3</sup>, (as Mn) 8 hours.</li> <li>COSHA PEL (United States, 1/2023).</li> <li>[Manganese compounds (as Mn)]</li> <li>CEL: 5 mg/m<sup>3</sup>, (as Mn) 8 hours.</li> <li>Costa PEL (United States, 1/2023).</li> <li>[Manganese and inorganic compounds (and magnetic compounds (as Mn)]</li> <li>CEL: 5 mg/m<sup>3</sup>, (as Mn) 8 hours.</li> <li>Form:</li> <li>Inhalable fraction</li> <li>None.</li> <li>ACGIH TLV (United States, 1/2023).</li> <li>[Costates, 1/2023).</li></ul>		
<ul> <li>xylene</li> <li>vapor) 8 hours.</li> <li>OSHA PEL (United States, 5/2018).</li> <li>(Xylenes (o., m., p-isomers)]</li> <li>TWA: 435 mg/m<sup>2</sup> 8 hours.</li> <li>TWA: 100 ppm 8 hours.</li> <li>ACGIH TLV (United States, 1/2023). [p- xylene and mixtures containing p-xylene]</li> <li>Ototoxicant.</li> <li>TWA: 20 ppm 8 hours.</li> <li>OSHA PEL (United States, 5/2018).</li> <li>(Manganese compounds (as Mn)]</li> <li>CEIL: 5 mg/m<sup>2</sup>, (as Mn)</li> <li>ACGIH TLV (United States, 1/2023).</li> <li>[Manganese compounds (as Mn)]</li> <li>CEIL: 5 mg/m<sup>2</sup>, (as Mn) 8 hours. Form:</li> <li>Inhalable fraction / Respirable fraction, as Mn]</li> <li>TWA: 0.02 mg/m<sup>2</sup>, (as Mn) 8 hours. Form:</li> <li>Respirable fraction</li> <li>None.</li> <li>ACGIH TLV (United States, 1/2023).</li> <li>[Cobalt bis(2-ethylhexanoate)</li> <li>cobalt bis(2-ethylhexanoate)</li> <li>cobalt</li></ul>		0
xylene       OŠHÅ PEL (United States, 5/2018).         (Xylenes (o-, m-, p-isomers)]       TWA: 435 mg/m <sup>3</sup> 8 hours.         manganese, 4-[(4-chloro-5-methyl-2-sulfophenyl)azo]-3-hydroxy-       TWA: 100 ppm 8 hours.         2-naphthalenecarboxylic acid complex       OSHA PEL (United States, 5/2018).         (Imaganese compounds (as Mn)]       CEIL: 5 mg/m <sup>3</sup> , (as Mn)         CEIL: 5 mg/m <sup>3</sup> , (as Mn)       ACGIH TLV (United States, 1/2023).         (Imaganese compounds (as Mn)]       CEIL: 5 mg/m <sup>3</sup> , (as Mn)         Cacioum bis(2-ethylhexanoate)       Imaganese and inorganic compounds (and Mn)]         calcium bis(2-ethylhexanoate)       None.         calcium bis(2-ethylhexanoate)       None.         2-ethylhexanoic acid, zirconium salt       ACGIH TLV (United States, 1/2023). [coba and inorganic compounds as Zr]         2-ethylhexanoic acid, zirconium salt       ACGIH TLV (United States, 1/2023).         ethylbenzene       ACGIH TLV (United States, 1/2023).         ethylbenzene       ACGIH TLV (United States, 5/2018).         ethylbenzene       ACGIH TLV (United States, 5/2018).         Vitro (Dited States, 5/2018).       [Zirconium and compounds as Zr]         STEL: 10 mg/m <sup>3</sup> , (as Zr) 8 hours.       ACGIH TLV (United States, 5/2018).         (Zirconium and compounds as Zr]       STEL: 10 mg/m		
[Xylenes (o, m., p-isomers)]         TWA: 435 mg/m³ 8 hours.         TWA: 435 mg/m³ 8 hours.         ACGIH TLV (United States, 1/2023). [p-xylene]         Ototoxicant.         TWA: 20 ppm 8 hours.         ACGIH TLV (United States, 5/2018).         (Manganese compounds (as Mn)]         CEIL: 5 mg/m³, (as Mn)         ACGIH TLV (United States, 1/2023).         (Manganese compounds (as Mn)]         CEIL: 5 mg/m³, (as Mn)         ACGIH TLV (United States, 1/2023).         (Manganese and inorganic compounds (as Mn)]         Celluinted States, 1/2023).         (Manganese and inorganic compounds (as Mn)]         Celluinted States, 1/2023).         (Manganese and inorganic compounds (as Mn) 8 hours. Form:         Inhalable fraction         None.         Cacioum bis(2-ethylhexanoate)         cobalt bis(2-ethylhexanoate)         cobalt bis(2-ethylhexanoate)         2-ethylhexanoic acid, zirconium salt         2-ethylhexanoic acid, zirconium salt         Ethylbenzene         ethylbenzene         ethylbenzene         ethylbenzene         ethylbenzene         ethylbenzene         ethylbenzene         ethylbenzene         ethylbenzene		
<ul> <li>TWA: 435 mg/m<sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.</li> <li>ACGIH TLV (United States, 1/2023). [p-xylene] Ototoxicant. TWA: 20 ppm 8 hours.</li> <li>OSHA PEL (United States, 5/2018). (Manganese compounds (as Mn)] CEIL: 5 mg/m<sup>3</sup>, (as Mn) ACGIH TLV (United States, 1/2023). [Manganese and inorganic compounds Inhalable fraction / Respirable fraction, as Mn] TWA: 0.02 mg/m<sup>3</sup>, (as Mn) 8 hours. Form: Inhalable fraction TWA: 0.02 mg/m<sup>3</sup>, (as Mn) 8 hours. Form: Respirable fraction None.</li> <li>ACGIH TLV (United States, 1/2023). [Construction] TWA: 0.02 mg/m<sup>3</sup>, (as Co) 8 hours.</li> <li>Coll TLV (United States, 1/2023). [Construction] TWA: 0.02 mg/m<sup>3</sup>, (as Co) 8 hours.</li> <li>Coll TLV (United States, 1/2023). [Zirconium and compounds as Zr] STEL: 10 mg/m<sup>3</sup>, (as Zr) 15 minutes. TWA: 5 mg/m<sup>3</sup>, (as Zr) 18 hours.</li> <li>CHI TLV (United States, 1/2023). [Zirconium and compounds as Zr] STEL: 10 mg/m<sup>3</sup>, (as Zr) 18 hours.</li> <li>CHI TLV (United States, 1/2023). [Zirconium compounds as Zr] TWA: 5 mg/m<sup>3</sup>, (as Zr) 18 hours.</li> <li>CHA PEL (United States, 1/2023). [Zirconium compounds as Zr] TWA: 5 mg/m<sup>3</sup>, (as Zr) 18 hours.</li> <li>CHA PEL (United States, 1/2023). [Zirconium compounds as Zr] TWA: 5 mg/m<sup>3</sup>, (as Zr) 18 hours.</li> <li>CHA PEL (United States, 1/2023). [Zirconium compounds (as Zr)] TWA: 5 mg/m<sup>3</sup>, (as Zr) 8 hours.</li> <li>CHA PEL (United States, 1/2023). [Zirconium compounds (as Zr)] TWA: 5 mg/m<sup>3</sup>, (as Zr) 8 hours.</li> <li>CHA PEL (United States, 1/2023). [Zirconium compounds (as Zr)] TWA: 5 mg/m<sup>3</sup>, (as Zr) 8 hours.</li> <li>CHA PEL (United States, 5/2018). [Zirconium compounds (as Zr)] TWA: 5 mg/m<sup>3</sup>, (as Zr) 8 hours.</li> <li>CHA PEL (United States, 5/2018). [Zirconium compounds (as Zr)] TWA: 30 mg/m<sup>3</sup> 8 hours.</li> </ul>	xylene	•
<ul> <li>tWA: 100 pm 8 hours.</li> <li>ACGH TLV (United States, 1/2023). [p-xylene and mixtures containing p-xylene]</li> <li>Ototoxicant.</li> <li>TWA: 20 ppm 8 hours.</li> <li>OSHA PEL (United States, 5/2018).</li> <li>[Manganese compounds (as Mn)]</li> <li>CEIL: 5 mg/m<sup>3</sup>, (as CI) 8 hours.</li> <li>ACGH TLV (United States, 1/2023).</li> <li>[Manganese and inorganic compounds Inhalable fraction / Respirable fraction, at Mn]</li> <li>TWA: 0.1 mg/m<sup>3</sup>, (as Mn) 8 hours. Form:</li> <li>Inhalable fraction</li> <li>TWA: 0.0 mg/m<sup>3</sup>, (as Mn) 8 hours. Form:</li> <li>Respirable fraction</li> <li>None.</li> <li>ACGH TLV (United States, 1/2023).</li> <li>[Construction]</li> <li>Cobalt bis(2-ethylhexanoate)</li> <li>Calcium bis</li></ul>		
ACGIH TLV (United States, 1/2023). [p- xylene and mixtures containing p-xylene] Ototoxicant. TWA: 20 ppm 8 hours. OSHA PEL (United States, 5/2018). [Manganese compounds (as Mn)] CEIL: 5 mg/m³, (as Mn) ACGIH TLV (United States, 1/2023). [Manganese and inorganic compounds Inhalable fraction / Respirable fraction, as Mn] TWA: 0.1 mg/m³, (as Mn) 8 hours. Form: Inhalable fraction None. ACGIH TLV (United States, 1/2023). [Compounds Inhalable fraction TWA: 0.02 mg/m³, (as Mn) 8 hours. Form: Inhalable fraction TWA: 0.02 mg/m³, (as Co) 8 hours. ACGIH TLV (United States, 1/2023). [Compounds Inhalable fraction TWA: 0.02 mg/m³, (as Co) 8 hours. ACGIH TLV (United States, 1/2023). [Zirconium and compounds as Zr] STEL: 10 mg/m³, (as Zr) 15 minutes. TWA: 5 mg/m³, (as Zr) 15 minutes. TWA: 5 mg/m³, (as Zr) 15 minutes. TWA: 5 mg/m³, (as Zr) 15 minutes. TWA: 20 ppm 8 hours. ACGIH TLV (United States, 1/2023). [Zirconium and compounds (as Zr]] TWA: 5 mg/m³, (as Zr) 8 hours. ACGIH TLV (United States, 1/2023). [Zirconium and compounds (as Zr]] TWA: 5 mg/m³, (as Zr) 8 hours. ACGIH TLV (United States, 1/2023). [Zirconium and compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours. ACGIH TLV (United States, 1/2023). [Zirconium and sompounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours. ACGIH TLV (United States, 1/2023). [Zirconium and sompounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours. ACGIH TLV (United States, 1/2023). [Zirconium and sompounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours. ACGIH TLV (United States, 1/2023). [Zirconium and sompounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours. ACGIH TLV (United States, 1/2023). [Zirconium and sompounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours. ACGIH TLV (United States, 1/2023). [Zirconium and sompounds (as Zr)] TWA: 435 mg/m³ 8 hours.		
xylene and mixtures containing p-xylene] Ototoxicant. TWA: 20 ppm 8 hours.2-naphthalenecarboxylic acid complexOtatoxicant. TWA: 20 ppm 8 hours.2-naphthalenecarboxylic acid complexOtH PEL (United States, 5/2018). [Manganese compounds (as Mn)] CEIL: 5 mg/m³, (as Mn) ACGIH TLV (United States, 1/2023). [Manganese and inorganic compounds inhalable fraction / Respirable fraction, as Mn] TWA: 0.1 mg/m³, (as Mn) 8 hours. Form: Inhalable fraction TWA: 0.02 mg/m³, (as Mn) 8 hours. Form: Respirable fraction None.2-ethylhexanoate) cobalt bis(2-ethylhexanoate)ACGIH TLV (United States, 1/2023). [Coba and inorganic compounds as Co] Skin sensitizer. Inhalation sensitizer. TWA: 0.02 mg/m³, (as Co) 8 hours.2-ethylhexanoic acid, zirconium saltACGIH TLV (United States, 1/2023). [Zirconium and compounds as Zr] STEL: 10 mg/m³, (as Zr) 18 hours. TWA: 5 mg/m³, (as Zr) 18 hours. COHA PEL (United States, 1/2023). [Zirconium compounds sa Zr]] TWA: 5 mg/m³, (as Zr) 18 hours.ethylbenzeneACGIH TLV (United States, 1/2023). [Zirconium compounds sa Zr]] TWA: 50 mg/m³, (as Zr) 18 hours. TWA: 20 ppm 8 hours.ethylbenzeneACGIH TLV (United States, 1/2023). (Diotoxicant. TWA: 20 ppm 8 hours.ethylbenzeneACGIH TLV (United States, 1/2023). (Zirconium compounds sa Zr]] TWA: 20 ppm 8 hours.ethylbenzeneACGIH TLV (United States, 5/2018). TWA: 435 mg/m³ (hours. TWA: 100 ppm 8 hours. TWA: 100 ppm 8 hours.		
obstance       Obstance         manganese, 4-[(4-chloro-5-methyl-2-sulfophenyl)azo]-3-hydroxy-       Obstance         2-naphthalenecarboxylic acid complex       Obstance         CELL: 5 mg/m³, (as Mn)       ACGIH TLV (United States, 1/2023).         [Manganese compounds (as Mn)]       CEIL: 5 mg/m³, (as Mn)         Calcium bis(2-ethylhexanoate)       Cobalt bis(2-ethylhexanoate)         cobalt bis(2-ethylhexanoate)       TWA: 0.1 mg/m³, (as Mn) 8 hours. Form:         cobalt bis(2-ethylhexanoate)       None.         2-ethylhexanoic acid, zirconium salt       Cobalt bis(2-ethylhexanoate)         2-ethylhexanoic acid, zirconium salt       Circonium compounds as Col 8 hours.         4-ethylbenzene       ACGIH TLV (United States, 1/2023).         ethylbenzene       Color mg/m³, (as Zr) 8 hours.         ethylbenzene       OSHA PEL (United States, 1/2023).         ethylbenzene       Color mg/m³, (as Zr) 8 hours.         ethylbenzene       Color mg/m³, (as Zr) 8 hours.         OSHA PEL (United States, 1/2023).       Colorotoxicant.         TWA: 20 ppm 8 hours.       COSHA PEL (United States, 5/2018).         TWA: 100 ppm 8 hours.       TWA: 100 ppm 8 hours.		ACGIH TLV (United States, 1/2023). [p-
obstance       Obstance         manganese, 4-[(4-chloro-5-methyl-2-sulfophenyl)azo]-3-hydroxy-       District of the states, 5/2018).         2-naphthalenecarboxylic acid complex       OshtA PEL (United States, 5/2018).         [Manganese compounds (as Mn)]       CEIL: 5 mg/m³, (as Mn)         ACGIH TLV (United States, 1/2023).       [Manganese and inorganic compounds inhalable fraction / Respirable fraction, as Mn]         calcium bis(2-ethylhexanoate)       TWA: 0.1 mg/m³, (as Mn) 8 hours. Form:         cobalt bis(2-ethylhexanoate)       TWA: 0.02 mg/m³, (as Mn) 8 hours. Form:         cobalt bis(2-ethylhexanoate)       ACGIH TLV (United States, 1/2023).         cobalt bis(2-ethylhexanoate)       None.         cobalt bis(2-ethylhexanoate)       ACGIH TLV (United States, 1/2023).         cobalt bis(2-ethylhexanoate)       None.         cobalt bis(2-ethylhexanoate)       ACGIH TLV (United States, 1/2023).         cobalt bis(2-ethylhexanoate)       ACGIH TLV (United States, 1/2023).         cobalt bis(2-ethylhexanoate)       States, 1/2023).         cobalt bis(2-ethylhexanoate)       ACGIH TLV (United States, 1/2023).         cobalt bis(2-ethylhexanoate)       TLV (United States, 1/2023).         cobalt bis(2-ethylhexanoate)       States, 1/2023).         cobalt bis(2-ethylhexanoate)       States, 1/2023).         cobalt bis(2-ethylhexanoate)       States,		xylene and mixtures containing p-xylene]
<ul> <li>TWA: 20 ppm 8 hours.</li> <li>OSHA PEL (United States, 5/2018).</li> <li>(Manganese compounds (as Mn)] CEIL: 5 mg/m<sup>3</sup>. (as Mn)</li> <li>ACGIH TLV (United States, 1/2023).</li> <li>(Manganese and inorganic compounds Inhalable fraction / Respirable fraction, as Mn]</li> <li>TWA: 0.1 mg/m<sup>3</sup>. (as Mn) 8 hours. Form:</li> <li>Inhalable fraction / Respirable fraction, as Mn]</li> <li>TWA: 0.02 mg/m<sup>3</sup>. (as Mn) 8 hours. Form:</li> <li>Respirable fraction</li> <li>None.</li> <li>ACGIH TLV (United States, 1/2023). [Coba and inorganic compounds as Co] Skin sensitizer. Inhalation sensitizer.</li> <li>TWA: 0.02 mg/m<sup>3</sup>. (as Co) 8 hours.</li> <li>ACGIH TLV (United States, 1/2023). [Coba and inorganic compounds as Co] Skin sensitizer. Inhalation sensitizer.</li> <li>TWA: 0.02 mg/m<sup>3</sup>. (as Co) 8 hours.</li> <li>ACGIH TLV (United States, 1/2023).</li> <li>[Zirconium and compounds as Zr]</li> <li>STEL: 10 mg/m<sup>3</sup>. (as Zr) 15 minutes.</li> <li>TWA: 5 mg/m<sup>3</sup>. (as Zr) 8 hours.</li> <li>OSHA PEL (United States, 5/2018).</li> <li>[Zirconium compounds (as Zr)]</li> <li>TWA: 20 ppm 8 hours.</li> <li>OSHA PEL (United States, 5/2018).</li> <li>[Zirconium compounds (as Zr)]</li> <li>TWA: 20 ppm 8 hours.</li> <li>OSHA PEL (United States, 5/2018).</li> <li>[Zirconium compounds (as Zr)]</li> <li>TWA: 20 ppm 8 hours.</li> </ul>		
<ul> <li>manganese, 4-[(4-chloro-5-methyl-2-sulfophenyl)azo]-3-hydroxy- 2-naphthalenecarboxylic acid complex</li> <li>2-naphthalenecarboxylic acid complex</li> <li>CBL: 5 mg/m<sup>3</sup>, (as Mn)</li> <li>ACGIH TLV (United States, 1/2023).</li> <li>[Manganese and inorganic compounds (as Mn)]</li> <li>ACGIH TLV (United States, 1/2023).</li> <li>[Manganese and inorganic compounds (and morganic compounds (as Mn)]</li> <li>TWA: 0.1 mg/m<sup>3</sup>, (as Mn) 8 hours. Form:</li> <li>Inhalable fraction</li> <li>TWA: 0.02 mg/m<sup>3</sup>, (as Mn) 8 hours. Form:</li> <li>Respirable fraction</li> <li>None.</li> <li>ACGIH TLV (United States, 1/2023). [coba and inorganic compounds as Co] Skin sensitizer.</li> <li>TWA: 0.02 mg/m<sup>3</sup>, (as Co) 8 hours.</li> <li>ACGIH TLV (United States, 1/2023). [coba and inorganic compounds as Co] Skin sensitizer.</li> <li>TWA: 0.02 mg/m<sup>3</sup>, (as Co) 8 hours.</li> <li>ACGIH TLV (United States, 1/2023).</li> <li>[Zirconium and compounds as Zr]</li> <li>STEL: 10 mg/m<sup>3</sup>, (as Zr) 15 minutes.</li> <li>TWA: 5 mg/m<sup>3</sup>, (as Zr) 8 hours.</li> <li>OSHA PEL (United States, 1/2023).</li> <li>[Zirconium compounds (as Zr)]</li> <li>TWA: 20 ppm 8 hours.</li> <li>OSHA PEL (United States, 5/2018).</li> <li>TWA: 20 ppm 8 hours.</li> <li>OSHA PEL (United States, 5/2018).</li> <li>TWA: 435 mg/m<sup>3</sup> 8 hours.</li> <li>TWA: 100 ppm 8 hours.</li> </ul>		
2-naphthalenecarboxylic acid complex       [Manganese compounds (as Mn)]         CEIL: 5 mg/m², (as Mn)       ACGIH TLV (United States, 1/2023).         [Manganese and inorganic compounds inhalable fraction / Respirable fraction, as       Mn]         TWA: 0.1 mg/m², (as Mn) 8 hours. Form:       Inhalable fraction         Inhalable fraction       TWA: 0.1 mg/m², (as Mn) 8 hours. Form:         Inhalable fraction       TWA: 0.02 mg/m², (as Mn) 8 hours. Form:         Inhalable fraction       TWA: 0.02 mg/m², (as Mn) 8 hours. Form:         Cobalt bis(2-ethylhexanoate)       ACGIH TLV (United States, 1/2023).         cobalt bis(2-ethylhexanoate)       ACGIH TLV (United States, 1/2023).         2-ethylhexanoic acid, zirconium salt       ACGIH TLV (United States, 1/2023).         2-ethylhexanoic acid, zirconium salt       ACGIH TLV (United States, 1/2023).         2-ethylhexanoic acid, zirconium salt       ACGIH TLV (United States, 1/2023).         2-ethylhexanoic acid, zirconium salt       ACGIH TLV (United States, 1/2023).         2-ethylhexanoic acid, zirconium salt       ACGIH TLV (United States, 1/2023).         2-ethylhexanoic acid, zirconium salt       ACGIH TLV (United States, 1/2023).         2-ethylhexanoic acid, zirconium salt       ACGIH TLV (United States, 5/2018).         [Zirconium compounds (as Zr)]       TWA: 5 mg/m², (as Zr) 8 hours.         ethylbenzene       ACGIH TLV (United	manganese 4-[(4-chloro-5-methyl-2-sulfonhenyl)azo]-3-hydroxy-	
<ul> <li>CEIL: 5 mg/m³, (as Mn)</li> <li>ACGIH TLV (United States, 1/2023). [Manganese and inorganic compounds inhalable fraction / Respirable fraction, as Mn]</li> <li>TWA: 0.1 mg/m³, (as Mn) 8 hours. Form: Inhalable fraction</li> <li>TWA: 0.1 mg/m³, (as Mn) 8 hours. Form: Inhalable fraction</li> <li>TWA: 0.02 mg/m³, (as Mn) 8 hours. Form: Respirable fraction</li> <li>ACGIH TLV (United States, 1/2023). [coba and inorganic compounds as Co] Skin sensitizer. Inhalation sensitizer.</li> <li>TWA: 0.02 mg/m³, (as Co) 8 hours.</li> <li>ACGIH TLV (United States, 1/2023). [Zirconium and compounds as Zr] STEL: 10 mg/m³, (as Zr) 15 minutes. TWA: 5 mg/m³, (as Zr) 15 minutes.</li> <li>TWA: 5 mg/m³, (as Zr) 15 minutes.</li> <li>TWA: 5 mg/m³, (as Zr) 8 hours.</li> <li>OSHA PEL (United States, 1/2023). [Zirconium compounds (as Zr)]</li> <li>TWA: 50 mg/m³, (as Zr) 8 hours.</li> <li>OSHA PEL (United States, 5/2018). [Zirconium Shours.</li> <li>OSHA PEL (United States, 5/2018).</li> <li>TWA: 20 ppm 8 hours.</li> <li>TWA: 435 mg/m³ 8 hours.</li> <li>TWA: 400 ppm 8 hours.</li> </ul>		•
ACGIH TLV (United States, 1/2023).         [Marganese and inorganic compounds inhalable fraction / Respirable fraction, as Min]         TWA: 0.1 mg/m³, (as Mn) 8 hours. Form: Inhalable fraction         calcium bis(2-ethylhexanoate)         cobalt bis(2-ethylhexanoate)         cobalt bis(2-ethylhexanoate)         2-ethylhexanoic acid, zirconium salt         2-ethylhexanoic acid, zirconium salt         ACGIH TLV (United States, 1/2023).         [Zirconium and compounds as Zr] STEL: 10 mg/m³, (as Zr) 8 hours.         TWA: 5 mg/m³, (as Zr) 8 hours.         OSHA PEL (United States, 1/2023).         [Zirconium compounds (as Zr)]         TWA: 50 mg/m³, (as Zr) 8 hours.         OSHA PEL (United States, 1/2023).         Otoxicant.         TWA: 50 mg/m³ 8 hours.         TWA: 30 mg/m³ 8 hours.         TWA: 30 mg/m³ 8 hours.		
[Manganese and inorganic compounds Inhalable fraction / Respirable fraction, as Mn] TWA: 0.1 mg/m³, (as Mn) 8 hours. Form: Inhalable fraction TWA: 0.02 mg/m³, (as Mn) 8 hours. Form: Respirable fraction None.calcium bis(2-ethylhexanoate) cobalt bis(2-ethylhexanoate)ACGIH TLV (United States, 1/2023). [coba and inorganic compounds as Co] Skin sensitizer. Inhalation sensitizer. TWA: 0.02 mg/m³, (as Co) 8 hours.2-ethylhexanoic acid, zirconium saltACGIH TLV (United States, 1/2023). [Zirconium and compounds as Zr] STEL: 10 mg/m³, (as Zr) 8 hours. OSHA PEL (United States, 5/2018). [Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours.ethylbenzeneACGIH TLV (United States, 1/2023). (Ottoxicati, TWA: 5 mg/m³, (as Zr) 8 hours. OSHA PEL (United States, 5/2018). TWA: 20 ppm 8 hours. OSHA PEL (United States, 5/2018). TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.		
ethylbenzene (hylbenzene ethylbenzene ethylbenzene ethylbenzene (calcium bis (2-ethylhexanoate) (calcium bis (2-ethylhexanoate		
Mn]         TWA: 0.1 mg/m³, (as Mn) 8 hours. Form:         Inhalable fraction         TWA: 0.02 mg/m³, (as Mn) 8 hours. Form:         Respirable fraction         TWA: 0.02 mg/m³, (as Mn) 8 hours. Form:         Respirable fraction         None.         ACGIH TLV (United States, 1/2023). [coba         and inorganic compounds as Co] Skin         sensitizer. Inhalation sensitizer.         TWA: 0.02 mg/m³, (as Co) 8 hours.         ACGIH TLV (United States, 1/2023).         [Zirconium and compounds as Zr]         STEL: 10 mg/m³, (as Zr) 15 minutes.         TWA: 5 mg/m³, (as Zr) 8 hours.         OSHA PEL (United States, 1/2023).         [Zirconium compounds (as Zr)]         TWA: 5 mg/m³, (as Zr) 8 hours.         ACGIH TLV (United States, 1/2023).         [Zirconium compounds (as Zr)]         TWA: 5 mg/m³, (as Zr) 8 hours.         ACGIH TLV (United States, 1/2023).         [Zirconium compounds (as Zr)]         TWA: 5 mg/m³, (as Zr) 8 hours.         ACGIH TLV (United States, 1/2023).         Ototoxicant.         TWA: 20 ppm 8 hours.         OSHA PEL (United States, 5/2018).         TWA: 435 mg/m³ 8 hours.         TWA: 100 ppm 8 hours.		
TWA: 0.1 mg/m³, (as Mn) 8 hours. Form: Inhalable fraction TWA: 0.02 mg/m³, (as Mn) 8 hours. Form: Respirable fraction None.calcium bis(2-ethylhexanoate) cobalt bis(2-ethylhexanoate)ACGIH TLV (United States, 1/2023). [coba and inorganic compounds as Co] Skin sensitizer. Inhalation sensitizer. TWA: 0.02 mg/m³, (as Co) 8 hours.2-ethylhexanoic acid, zirconium saltACGIH TLV (United States, 1/2023). [Zirconium and compounds as Zr] STEL: 10 mg/m³, (as Zr) 8 hours. OSHA PEL (United States, 5/2018). [Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours.ethylbenzeneACGIH TLV (United States, 1/2023). (Dited States, 1/2023). (Dited States, 5/2018). [Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours.ethylbenzeneACGIH TLV (United States, 5/2018). [Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours.ethylbenzeneACGIH TLV (United States, 5/2018). [Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours.ethylbenzeneACGIH TLV (United States, 5/2018). [Zirconium compounds (as Zr)] TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.		Inhalable fraction / Respirable fraction, as
Inhalable fractioncalcium bis(2-ethylhexanoate)cobalt bis(2-ethylhexanoate)2-ethylhexanoic acid, zirconium salt2-ethylhexanoic acid, zirconium saltEthylbenzeneethylbenzeneCGIH TLV (United States, 1/2023).Coll TLV (United States, 5/2018).TWA: 5 mg/m³, (as Zr) 8 hours.OSHA PEL (United States, 1/2023).Ototoxicant.TWA: 20 ppm 8 hours.Cosh PEL (United States, 5/2018).TWA: 435 mg/m³ 8 hours.TWA: 100 ppm 8 hours.		Mn]
Inhalable fractioncalcium bis(2-ethylhexanoate)cobalt bis(2-ethylhexanoate)2-ethylhexanoic acid, zirconium salt2-ethylhexanoic acid, zirconium saltEthylbenzeneethylbenzeneCGIH TLV (United States, 1/2023).Coll TLV (United States, 5/2018).TWA: 5 mg/m³, (as Zr) 8 hours.OSHA PEL (United States, 1/2023).Ototoxicant.TWA: 20 ppm 8 hours.Cosh PEL (United States, 5/2018).TWA: 435 mg/m³ 8 hours.TWA: 100 ppm 8 hours.		TWA: 0.1 mg/m <sup>3</sup> , (as Mn) 8 hours. Form:
calcium bis(2-ethylhexanoate) cobalt bis(2-ethylhexanoate)Respirable fraction None.2-ethylhexanoic acid, zirconium saltACGIH TLV (United States, 1/2023). [coba and inorganic compounds as Co] Skin sensitizer. Inhalation sensitizer. TWA: 0.02 mg/m³, (as Co) 8 hours. ACGIH TLV (United States, 1/2023). [Zirconium and compounds as Zr] STEL: 10 mg/m³, (as Zr) 15 minutes. TWA: 5 mg/m³, (as Zr) 8 hours. OSHA PEL (United States, 5/2018). [Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours.ethylbenzeneACGIH TLV (United States, 1/2023). (Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours. OSHA PEL (United States, 1/2023). (United States, 5/2018). TWA: 20 ppm 8 hours.ototoxicant. TWA: 20 ppm 8 hours. TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.		
calcium bis(2-ethylhexanoate) cobalt bis(2-ethylhexanoate)Respirable fraction None.2-ethylhexanoic acid, zirconium saltACGIH TLV (United States, 1/2023). [coba and inorganic compounds as Co] Skin sensitizer. Inhalation sensitizer. TWA: 0.02 mg/m³, (as Co) 8 hours. ACGIH TLV (United States, 1/2023). [Zirconium and compounds as Zr] STEL: 10 mg/m³, (as Zr) 15 minutes. TWA: 5 mg/m³, (as Zr) 8 hours. OSHA PEL (United States, 5/2018). [Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours.ethylbenzeneACGIH TLV (United States, 1/2023). (Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours. OSHA PEL (United States, 1/2023). (United States, 5/2018). TWA: 20 ppm 8 hours.ototoxicant. TWA: 20 ppm 8 hours. TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.		TWA: 0.02 mg/m <sup>3</sup> . (as Mn) 8 hours. Form:
calcium bis(2-ethylhexanoate) cobalt bis(2-ethylhexanoate) 2-ethylhexanoic acid, zirconium salt 2-ethylhexanoic acid, zirconium salt 4CGIH TLV (United States, 1/2023). [coba and inorganic compounds as Co] Skin sensitizer. Inhalation sensitizer. TWA: 0.02 mg/m³, (as Co) 8 hours. ACGIH TLV (United States, 1/2023). [Zirconium and compounds as Zr] STEL: 10 mg/m³, (as Zr) 15 minutes. TWA: 5 mg/m³, (as Zr) 8 hours. OSHA PEL (United States, 5/2018). [Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours. ACGIH TLV (United States, 1/2023). Ototoxicant. TWA: 20 ppm 8 hours. OSHA PEL (United States, 5/2018). TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.		
cobalt bis(2-ethylhexanoate)ACGIH TLV (United States, 1/2023). [coba and inorganic compounds as Co] Skin sensitizer. Inhalation sensitizer. TWA: 0.02 mg/m³, (as Co) 8 hours.2-ethylhexanoic acid, zirconium saltACGIH TLV (United States, 1/2023). [Zirconium and compounds as Zr] STEL: 10 mg/m³, (as Zr) 15 minutes. TWA: 5 mg/m³, (as Zr) 8 hours.ethylbenzeneOSHA PEL (United States, 5/2018). [Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours.ethylbenzeneACGIH TLV (United States, 1/2023). Ototoxicant. TWA: 20 ppm 8 hours.OSHA PEL (United States, 1/2023). TWA: 20 ppm 8 hours.OSHA PEL (United States, 5/2018). TWA: 20 ppm 8 hours.OSHA PEL (United States, 5/2018). TWA: 20 ppm 8 hours.TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.	calcium bis(2-ethylbexanoate)	
and inorganic compounds as Co] Skin sensitizer. Inhalation sensitizer. TWA: 0.02 mg/m³, (as Co) 8 hours. ACGIH TLV (United States, 1/2023). [Zirconium and compounds as Zr] STEL: 10 mg/m³, (as Zr) 15 minutes. TWA: 5 mg/m³, (as Zr) 8 hours. OSHA PEL (United States, 5/2018). [Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours. ACGIH TLV (United States, 1/2023). Ototoxicant. TWA: 20 ppm 8 hours. OSHA PEL (United States, 5/2018). TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.		
2-ethylhexanoic acid, zirconium salt 2-ethylhexanoic acid, zirconium salt 3		
2-ethylhexanoic acid, zirconium saltTWA: 0.02 mg/m³, (as Co) 8 hours.2-ethylhexanoic acid, zirconium saltACGIH TLV (United States, 1/2023).[Zirconium and compounds as Zr] STEL: 10 mg/m³, (as Zr) 15 minutes. TWA: 5 mg/m³, (as Zr) 8 hours.OSHA PEL (United States, 5/2018).[Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours.ethylbenzeneACGIH TLV (United States, 1/2023).Ototoxicant. TWA: 20 ppm 8 hours.OSHA PEL (United States, 5/2018). TWA: 32 mg/m³ 8 hours.TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.		• • •
2-ethylhexanoic acid, zirconium salt 2-ethylhexanoic acid, zirconium salt ACGIH TLV (United States, 1/2023). [Zirconium and compounds as Zr] STEL: 10 mg/m³, (as Zr) 15 minutes. TWA: 5 mg/m³, (as Zr) 8 hours. OSHA PEL (United States, 5/2018). [Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours. ACGIH TLV (United States, 1/2023). Ototoxicant. TWA: 20 ppm 8 hours. OSHA PEL (United States, 5/2018). TWA: 435 mg/m³ 8 hours. TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.		
[Zirconium and compounds as Zr] STEL: 10 mg/m³, (as Zr) 15 minutes. TWA: 5 mg/m³, (as Zr) 8 hours.OSHA PEL (United States, 5/2018). [Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours.ethylbenzeneACGIH TLV (United States, 1/2023). Ototoxicant. TWA: 20 ppm 8 hours.OSHA PEL (United States, 5/2018). TWA: 100 ppm 8 hours.		
STEL: 10 mg/m³, (as Zr) 15 minutes. TWA: 5 mg/m³, (as Zr) 8 hours.OSHA PEL (United States, 5/2018).[Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours.ethylbenzeneACGIH TLV (United States, 1/2023).Ototoxicant. TWA: 20 ppm 8 hours.OSHA PEL (United States, 5/2018). TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.	2-ethylhexanoic acid, zirconium salt	
TWA: 5 mg/m³, (as Zr) 8 hours.OSHA PEL (United States, 5/2018).[Zirconium compounds (as Zr)]TWA: 5 mg/m³, (as Zr) 8 hours.ethylbenzeneACGIH TLV (United States, 1/2023).Ototoxicant.TWA: 20 ppm 8 hours.OSHA PEL (United States, 5/2018).TWA: 435 mg/m³ 8 hours.TWA: 100 ppm 8 hours.		
OSHA PEL (United States, 5/2018).[Zirconium compounds (as Zr)]TWA: 5 mg/m³, (as Zr) 8 hours.ethylbenzeneACGIH TLV (United States, 1/2023).Ototoxicant.TWA: 20 ppm 8 hours.OSHA PEL (United States, 5/2018).TWA: 435 mg/m³ 8 hours.TWA: 100 ppm 8 hours.		
[Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours.ethylbenzeneACGIH TLV (United States, 1/2023).Ototoxicant. TWA: 20 ppm 8 hours.TWA: 20 ppm 8 hours.OSHA PEL (United States, 5/2018). TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.		TWA: 5 mg/m <sup>3</sup> , (as Zr) 8 hours.
[Zirconium compounds (as Zr)] TWA: 5 mg/m³, (as Zr) 8 hours.ethylbenzeneACGIH TLV (United States, 1/2023).Ototoxicant. TWA: 20 ppm 8 hours.TWA: 20 ppm 8 hours.OSHA PEL (United States, 5/2018). TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.		OSHA PEL (United States, 5/2018).
ethylbenzeneTWA: 5 mg/m³, (as Zr) 8 hours.ACGIH TLV (United States, 1/2023).Ototoxicant.TWA: 20 ppm 8 hours.OSHA PEL (United States, 5/2018).TWA: 435 mg/m³ 8 hours.TWA: 100 ppm 8 hours.		
ethylbenzeneACGIH TLV (United States, 1/2023).Ototoxicant.TWA: 20 ppm 8 hours.TWA: 20 ppm 8 hours.OSHA PEL (United States, 5/2018).TWA: 435 mg/m³ 8 hours.TWA: 100 ppm 8 hours.		
Ototoxicant. TWA: 20 ppm 8 hours. OSHA PEL (United States, 5/2018). TWA: 435 mg/m <sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.	ethylbenzene	
TWA: 20 ppm 8 hours. OSHA PEL (United States, 5/2018). TWA: 435 mg/m <sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.		
OSHA PEL (United States, 5/2018). TWA: 435 mg/m <sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.		
TWA: 435 mg/m <sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.		
TWA: 100 ppm 8 hours.		
2-butanone oxime IPEL (-).		
	2-butanone oxime	IPEL (-).

Product name BRIGHT RED

## Section 8. Exposure controls/personal protection

		TWA: 3 ppm	
		STEL: 9 ppm	
	Key to abbreviations		
A       = Acceptable Maximum Peak         ACGIH       = American Conference of Governmental Industrial Hygienists.         C       = Ceiling Limit         F       = Fume         IPEL       = Internal Permissible Exposure Limit         OSHA       = Occupational Safety and Health Administration.         R       = Respirable         Z       = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		S= Potential skin absorptionSR= Respiratory sensitizationSS= Skin sensitizationSTEL= Short term Exposure limit valuesTD= Total dustTLV= Threshold Limit ValueTWA= Time Weighted Average	
Consult local authorities for a			
Recommended monitoring procedures		ate monitoring standards. Reference to national e determination of hazardous substances will	
Appropriate engineering controls	other engineering controls to keep work recommended or statutory limits. The	e process enclosures, local exhaust ventilation or ker exposure to airborne contaminants below any engineering controls also need to keep gas, v lower explosive limits. Use explosion-proof	
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.		
Individual protection measure	<u>s</u>		
Hygiene measures	eating, smoking and using the lavatory Appropriate techniques should be used Contaminated work clothing should not	to remove potentially contaminated clothing. be allowed out of the workplace. Wash Ensure that eyewash stations and safety	
Eye/face protection	: Chemical splash goggles.		
Skin protection			
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.		
Gloves	: butyl rubber		
Body protection	Personal protective equipment for the body should be selected based on the task bein performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.		

Product name BRIGHT RED

## Section 8. Exposure controls/personal protection

Other skin protection	<ul> <li>Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.</li> </ul>
Respiratory protection	: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. The respiratory protection shall be in accordance to 29 CFR 1910.134.

## Section 9. Physical and chemical properties

Appearance			
Physical state	:	Liquid.	
Color	1	Red.	
Odor	1	Not available.	
Odor threshold	:	Not available.	
рН	4	Not available.	
Melting point	1	Not available.	
Boiling point	1	>37.78°C (>100°F)	
Flash point	1	Closed cup: 38°C (100.4°F)	
Auto-ignition temperature	1	Not available.	
Decomposition temperature	1	Not available.	
Flammability	1	Not available.	
Lower and upper explosive (flammable) limits	1	Not available.	
Evaporation rate	1	Not available.	
Vapor pressure	1	Not available.	
Vapor density	1	Not available.	
Relative density	:	1.01	
Density(lbs / gal)	1	8.43	
		Media	Result
Solubility(ies)	ł	cold water	Partially soluble
Partition coefficient: n- octanol/water	;	Not applicable.	
Viscosity	:	Kinematic (40°C (104°F)): >	•21 mm²/s (>21 cSt)
Volatility	:	44% (v/v), 33.767% (w/w)	
% Solid. (w/w)	:	66.233	

### Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides halogenated compounds metal oxide/ oxides

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Stoddard solvent	LD50 Oral	Rat	>5 g/kg	-
Naphtha (petroleum),	LD50 Dermal	Rabbit	>5000 mg/kg	-
hydrotreated heavy				
	LD50 Oral	Rat	>6 g/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
cobalt bis(2-ethylhexanoate)	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	3129 mg/kg	-
2-ethylhexanoic acid,	LD50 Dermal	Rabbit	>5 g/kg	-
zirconium salt				
	LD50 Oral	Rat	>5 g/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
2-butanone oxime	LD50 Dermal	Rabbit	1100 mg/kg	-
	LD50 Oral	Rat	100 mg/kg	-

**Conclusion/Summary** : There are no data available on the mixture itself.

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>x</b> ylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Conclusion/Summary Skin : There are no data available on the mixture itself.					
Eyes	: There are no data available on the mixture itself.				

Page: 10/18

**United States** 

Product name BRIGHT RED

### Section 11. Toxicological information

Respiratory	: There are no data available on the mixture itself.			
Sensitization				
Conclusion/Summary				
Skin	: There are	e no data av	vailable on the mixture itself.	
Respiratory	: There are no data available on the mixture itself.			
<u>Mutagenicity</u>				
<b>Conclusion/Summary</b>	: There are	e no data av	vailable on the mixture itself.	
<b>Carcinogenicity</b>				
Conclusion/Summary	: There are	e no data av	vailable on the mixture itself.	
<b>Classification</b>				
Product/ingredient name	OSHA	IARC	NTP	

Product/ingredient name	OSHA	IARC	NTP
✓ylene	-	3	-
cobalt bis(2-ethylhexanoate)	-	2B	Reasonably anticipated to be a human carcinogen.
ethylbenzene	-	2B	-

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4 NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen OSHA: + Not listed/not regulated: -

#### **Reproductive toxicity**

Conclusion/Summary

: There are no data available on the mixture itself.

#### **Teratogenicity**

**Conclusion/Summary** : There are no data available on the mixture itself.

#### Specific target organ toxicity (single exposure)

Name	• •	Route of exposure	Target organs
Naphtha (petroleum), hydrotreated heavy	Category 3		Respiratory tract irritation
xylene	Category 3		Respiratory tract irritation

#### Specific target organ toxicity (repeated exposure)

Name	•••	Route of exposure	Target organs
Stoddard solvent	Category 1		central nervous system (CNS)
ethylbenzene	Category 2		hearing organs

**Target organs** 

: Contains material which causes damage to the following organs: brain. Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, liver, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea, testes.

#### Aspiration hazard

United States	Page: 11/18
---------------	-------------

Product name BRIGHT RED

## Section 11. Toxicological information

Name	Result
Stoddard solvent	ASPIRATION HAZARD - Category 1
Naphtha (petroleum), hydrotreated heavy	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light	ASPIRATION HAZARD - Category 1
xylene	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1

### Information on the likely routes of exposure

Potential acute health effec	te
Eye contact	: Causes serious eye irritation.
Inhalation	: Harmful if inhaled.
Skin contact	Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin
okin contact	reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sympt	
Eye contact	: Adverse symptoms may include the following: pain or irritation watering
	redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths
	skeletal malformations
Skin contact	: Adverse symptoms may include the following:
	irritation
	redness dryness
	cracking
	reduced fetal weight
	increase in fetal deaths
	skeletal malformations
Ingestion	: Adverse symptoms may include the following:
-	reduced fetal weight
	increase in fetal deaths
	skeletal malformations
Delayed and immediate effect	ts and also chronic effects from short and long term exposure
Conclusion/Summary	: There are no data available on the mixture itself. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. 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. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. 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.
<u>Short term exposure</u>	

Product name BRIGHT RED

## Section 11. Toxicological information

Potential immediate effects	: There are no data available on the mixture itself.
Potential delayed effects	: There are no data available on the mixture itself.
<u>Long term exposure</u>	
Potential immediate effects	: There are no data available on the mixture itself.
Potential delayed effects	: There are no data available on the mixture itself.
Potential chronic health eff	ects
General	: Causes damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: May damage fertility or the unborn child.

### Numerical measures of toxicity

### Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/ I)
BRIGHT RED	152850.8	17144.2	N/A	36.5	5.0
xylene	4300	1700	N/A	11	1.5
cobalt bis(2-ethylhexanoate)	3129	N/A	N/A	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5
2-butanone oxime	500	1100	N/A	N/A	N/A

## Section 12. Ecological information

### **Toxicity**

Product/ingredient name	Result	Species	Exposure
2-ethylhexanoic acid, zirconium salt	Acute LC50 >100 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia - <i>Ceriodaphnia dubia</i>	48 hours -

### Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
ethylbenzene	-	79 % - Readily - 10 days	-	-

United States Pag
-------------------

Product name BRIGHT RED

## Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Distillates (petroleum), hydrotreated light	-	-	Readily
xylene ethylbenzene	-	-	Readily Readily

### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Stoddard solvent	3.16 to 7.06	-	High
Distillates (petroleum),	-	159	Low
hydrotreated light			
xylene	3.12	7.4 to 18.5	Low
ethylbenzene	3.6	79.43	Low
2-butanone oxime	0.63	5.01	Low

#### Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

## Section 13. Disposal considerations

**Disposal methods** 

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

### 14. Transport information

Product name BRIGHT RED

### 14. Transport information

	DOT	IMDG	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class (es)	3	3	3
Packing group	111		Ш
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	7323.1	Not applicable.	Not applicable.
RQ substances	(xylene)	Not applicable.	Not applicable.

### **Additional information**

DOT	<ul> <li>This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable guantity.</li> </ul>
IMDG	: None identified.
ΙΑΤΑ	: None identified.

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not applicable. to IMO instruments

### Section 15. Regulatory information

### **United States**

United States inventory (TSCA 8b) : At least one component is inactive.

United States - TSCA 5(a)2 - Final significant new use rules:

mercury

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Listed

Product name BRIGHT RED

## Section 15. Regulatory information

Classification	: FLAMMABLE LIQUIDS - Category 3
	ACUTE TOXICITY (inhalation) - Category 4
	EYE IRRITATION - Category 2A
	SKIN SENSITIZATION - Category 1
	CARCINOGENICITY - Category 1B
	TOXIC TO REPRODUCTION - Category 1B
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 HNOC - Defatting irritant

Composition/information on ingredients

	Classification
≥10 - ≤20	FLAMMABLE LIQUIDS - Category 3 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant
≥5.0 - ≤10	FLAMMABLE LIQUIDS - Category 4 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant
≥5.0 - ≤10	ASPIRATION HAZARD - Category 1
≥0.10 - ≤2.4	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 ASPIRATION HAZARD - Category 1
≥1.0 - ≤5.0	EYE IRRITATION - Category 2A
<1.0	SERIOUS EYE DAMAGE - Category 1 TOXIC TO REPRODUCTION - Category 1B
<1.0	EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1A CARCINOGENICITY - Category 1B TOXIC TO REPRODUCTION - Category 1B
≤1.0	COMBUSTIBLE DUSTS TOXIC TO REPRODUCTION - Category 1B
<1.0	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1
	≥5.0 - ≤10 ≥5.0 - ≤10 ≥0.10 - ≤2.4 ≥1.0 - ≤5.0 <1.0 <1.0

United States Page: 16/18

Product name BRIGHT RED

### Section 15. Regulatory information

		HNOC - Defatting irritant	
2-butanone oxime	<1.0	FLAMMABLE LIQUIDS - Category 4	
		ACUTE TOXICITY (oral) - Category 4	
		ACUTE TOXICITY (dermal) - Category 4	
		SERIOUS EYE DAMAGE - Category 1	
		SKIN SENSITIZATION - Category 1B	
		CARCINOGENICITY - Category 2	

### <u>SARA 313</u>

	Chemical name	<u>CAS number</u>	<b>Concentration</b>
Supplier notification	: xylene	1330-20-7	0.5 - 1.5
	manganese, 4-[(4-chloro-5-methyl-2-sulfophenyl)	12238-31-2	0.5 - 1.5
	azo]-3-hydroxy-2-naphthalenecarboxylic acid		
	complex		
	cobalt bis(2-ethylhexanoate)	136-52-7	0.1 - 1
	ethylbenzene	100-41-4	0.1 - 1
	mercury	7439-97-6	0.000028275
	lead massive	7439-92-1	0.000018415

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

### California Prop. 65

**WARNING**: Cancer - www.P65Warnings.ca.gov.

### Section 16. Other information

Hazardous Material Information System (U.S.A.)

```
Health : 2 * Flammability : 2 Physical hazards : 0
```

(\*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

Health : 2 Flamma	bility : 2 Instability : 0	
Date of previous issue	: 10/1/2021	
Organization that prepared the SDS	: EHS	
Key to abbreviations	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient	

United States Page: 17/18

Product name BRIGHT RED

### Section 16. Other information

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations

### Indicates information that has changed from previously issued version.

#### **Disclaimer**

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.