

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 02/12/2016

# **SECTION 1: Identification**

## 1.1. Identification

Product form : Mixture
Product name : VE-SR-RED
Product code : VE-SR-RED

Other means of identification : VE-SR-RED/52, VE-SR-RED/5SF

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

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Protective Industrial Polymers 7875 Bliss Parkway North Ridgeville, Ohio 44039 - USA-Ohio T 440-327-0015 www.protectpoly.com

# 1.4. Emergency telephone number

Emergency number : Chemtrec: 800-427-9300 (Outside USA) 703-527-3887

# SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

#### **GHS-US** classification

Flammable liquids, Category 3

Acute toxicity (oral), Category 4

Skin corrosion/irritation, Category 2

H315

Serious eye damage/eye irritation, Category 2A

Carcinogenicity, Category 2

H351

Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation

H335

Full text of H statements : see section 16

# 2.2. Label elements

### **GHS-US** labelling

Hazard pictograms (GHS-US)





GHS07

GHS08

Signal word (GHS-US) : Warning

Contains : cobalt(II) ethylhexanoate; Styrene; Methacrylic Acid; Carbon black; Titanium Dioxide

Hazard statements (GHS-US) : H226 - Flammable liquid and vapour

H302 - Harmful if swallowed H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation H351 - Suspected of causing cancer

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P210 - Keep away from sparks. - No smoking

P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment P241 - Use explosion-proof electrical equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

P261 - Avoid breathing vapours

P264 - Wash hands, forearms and face thoroughly after handling P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area

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P280 - Wear protective clothing

P301+P312 - If swallowed: Call a POISON CENTER if you feel unwell

P302+P352 - If on skin: Wash with plenty of soap

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P308+P313 - If exposed or concerned: Get medical advice/attention

P312 - Call a doctor if you feel unwell

P321 - Specific treatment (see on this label)

P330 - Rinse mouth

P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse

P370+P378 - In case of fire: Use to extinguish

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P403+P235 - Store in a well-ventilated place. Keep cool

P405 - Store locked up

P501 - Dispose of contents/container to in accordance with local regulations

#### 2.3. Other hazards

No additional information available

# 2.4. Unknown acute toxicity (GHS US)

Not applicable

# SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

| Name                      | Product identifier  | %       | GHS-US classification   |
|---------------------------|---------------------|---------|---|
| Styrene                   | (CAS No) 100-42-5   | 25 - 40 | Flam. Liq. 3, H226<br>Acute Tox. 4 (Oral), H302<br>Skin Irrit. 2, H315<br>Eye Irrit. 2A, H319<br>STOT SE 3, H335<br>Asp. Tox. 1, H304 |
| Methacrylic Acid          | (CAS No) 79-41-4    | 0 - 5   | Flam. Liq. 4, H227<br>Acute Tox. 4 (Oral), H302<br>Acute Tox. 3 (Dermal), H311  |
| Titanium Dioxide          | (CAS No) 13463-67-7 | 0 - 1   | Carc. 2, H351   |
| cobalt(II) ethylhexanoate | (CAS No) 136-52-7   | 0 - 0.1 | Carc. 2, H351   |
| Carbon black              | (CAS No) 1333-86-4  | 0 - 0.1 | Carc. 2, H351   |

Full text of H-statements: see section 16

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you

feel unwell

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a

doctor if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin

irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : 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/attention.

First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

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

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Irritation.
Symptoms/injuries after eye contact : Eye irritation.

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

Treat symptomatically.

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# **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Reactivity : Highly flammable liquid and vapour.

## 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

# **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing vapours.

Avoid contact with skin and eyes.

## 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

# 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

waters.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

#### **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Avoid breathing vapours. Avoid

contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

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| cobait(ii) ethylnexa | cobalt(ii) ethylnexanoate (130-32-7) |   |  |
|----------------------|--------------------------------------|---|--|
| Not applicable       | Not applicable                       |   |  |
| Styrene (100-42-5)   |                                      |   |  |
| ACGIH                | ACGIH TWA (ppm)                      | 20 ppm (Styrene, monomer; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value) |  |
| ACGIH                | ACGIH STEL (ppm)                     | 40 ppm (Styrene, monomer; USA; Short time value; TLV - Adopted Value)                         |  |
| ACGIH                | Remark (ACGIH)                       | CNS impair; URT irr; peripheral   |  |
| OSHA                 | Remark (OSHA)                        | (2) See Table Z-2.  |  |

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| Methacrylic Acid (79-41-4)   |                        |  |
|------------------------------|------------------------|--|
| ACGIH                        | ACGIH TWA (ppm)        | 20 ppm (Methacrylic acid; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)                  |
| ACGIH                        | Remark (ACGIH)         | Skin & eye irr   |
| Carbon black (1333-86-4)     |                        |  |
| ACGIH                        | ACGIH TWA (mg/m³)      | 3 mg/m³ (Carbon black; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction) |
| ACGIH                        | Remark (ACGIH)         | Bronchitis   |
| OSHA                         | OSHA PEL (TWA) (mg/m³) | 3.5 mg/m³  |
| Titanium Dioxide (13463-67-7 | 7)                     |  |
| ACGIH                        | ACGIH TWA (mg/m³)      | 10 mg/m³ (Titanium dioxide; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)                |
| ACGIH                        | Remark (ACGIH)         | LRT irr; A3  |
| OSHA                         | OSHA PEL (TWA) (mg/m³) | 15 mg/m³   |

# 8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Hand protection : Protective gloves. Eye protection : Safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental exposure controls : Avoid release to the environment.

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour : red

Odour : styrene characteristic
Odour threshold : No data available
pH : No data available
Melting point : Not applicable
Freezing point : No data available
Boiling point : ≈ 293 °F

Boiling point :  $\approx 293 \, ^{\circ}\text{F}$ Flash point :  $\approx 82 \, ^{\circ}\text{F}$ 

Relative evaporation rate (butylacetate=1) : No data available : No data available Flammability (solid, gas) Explosive limits No data available : No data available Explosive properties Oxidising properties No data available Vapour pressure : No data available Relative density : No data available Relative vapour density at 20 °C : No data available

Solubility : Water: Solubility in water of component(s) of the mixture :

• N,N-dimethylaniline: 0.12 g/100ml (20 °C) • cobalt(II) ethylhexanoate: 4.03 g/100ml (20 °C) • Stoddard solvent: insoluble • Styrene: 0.030 g/100ml • Methacrylic Acid: 9.8 g/100ml (20 °C) • 1,2-Benzenediol: 45 g/100ml • Methyl Hydroxide: >= 100 g/100ml (20 °C) • alphamethyltoluene: 0.02 g/100ml • Carbon black: < 0.01 g/100ml • Hydrated aluminum silicate: <

0.1 g/100ml • Iron Oxide: < 0.1 g/100ml • Titanium Dioxide: 0.15 g/100ml

Log Pow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available

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Viscosity, kinematic : No data available Viscosity, dynamic : No data available

# 9.2. Other information

No additional information available

# **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

Highly flammable liquid and vapour.

#### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

#### 10.5. Incompatible materials

No additional information available

# 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

| VE-SR-RED                            |  |
|--------------------------------------|--|
| ATE US (oral)                        | 1245.530 mg/kg bodyweight  |
| cobalt(II) ethylhexanoate (136-52-7) |  |
| LD50 oral rat                        | 3129 mg/kg bodyweight (Rat; OECD 425: Acute Oral Toxicity: Up-and-Down Procedure; Experimental value)                |
| LD50 dermal rat                      | > 2000 mg/kg bodyweight (Rat; Weight of evidence; OECD 402: Acute Dermal Toxicity)                                   |
| ATE US (oral)                        | 3129.000 mg/kg bodyweight  |
| Styrene (100-42-5)                   |  |
| LD50 oral rat                        | 5000 mg/kg (Rat; Literature study; >6000 mg/kg bodyweight; Rat; Weight of evidence)                                  |
| LD50 dermal rat                      | 2820 mg/kg (Rat; Literature study; OECD 402: Acute Dermal Toxicity; >2000 mg/kg bodyweight; Rat; Experimental value) |
| LD50 dermal rabbit                   | 5010 mg/kg (Rabbit; Literature study)  |
| LC50 inhalation rat (mg/l)           | 12 mg/l/4h (Rat; Literature study)   |
| LC50 inhalation rat (ppm)            | 2770 ppm/4h (Rat; Literature study)  |
| ATE US (oral)                        | 500.000 mg/kg bodyweight   |
| ATE US (dermal)                      | 2820.000 mg/kg bodyweight  |
| ATE US (gases)                       | 2770.000 ppmv/4h   |
| ATE US (vapours)                     | 12.000 mg/l/4h   |
| ATE US (dust,mist)                   | 12.000 mg/l/4h   |
| Methacrylic Acid (79-41-4)           |  |
| LD50 oral rat                        | 1060 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; 1320 mg/kg bodyweight; Rat)                  |
| LD50 dermal rabbit                   | 500 mg/kg bodyweight (Rabbit; Experimental value; Other; 500-1000 mg/kg bodyweight; Rabbit)                          |
| LC50 inhalation rat (mg/l)           | 7 mg/l/4h (Rat)  |
| ATE US (oral)                        | 1060.000 mg/kg bodyweight  |
| ATE US (dermal)                      | 500.000 mg/kg bodyweight   |
| ATE US (vapours)                     | 7.000 mg/l/4h  |
| ATE US (dust,mist)                   | 7.000 mg/l/4h  |
| Carbon black (1333-86-4)             |  |
| LD50 oral rat                        | > 8000 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value)  |

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| Serious eye damage/irritation : Causes serious eye irritation.  Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Suspected of causing cancer.  Cobalt(II) ethylhexanoate (136-52-7)  IARC group   2B - Possibly carcinogenic to humans  Styrene (100-42-5)  IARC group   2B - Possibly carcinogenic to humans  National Toxicology Program (NTP) Status   3 - Reasonably anticipated to be Human Carcinogen  IARC group   2B - Possibly carcinogenic to humans  National Toxicology Program (NTP) Status   3 - Reasonably anticipated to be Human Carcinogen  Carbon black (1333-86-4)  IARC group   2B - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group   2B - Possibly carcinogenic to humans  Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : May cause respiratory irritation.  Specific target organ toxicity (repeated exposure) : Not classified  Symptoms/injuries after inhalation : May cause respiratory irritation.  Symptoms/injuries after skin contact : Irritation.  |  |   |
|--|--|---|
| Titanium Dioxide (13463-67-7)  LD50 oral rat   | Carbon black (1333-86-4)                           |   |
| LD50 oral rat    > 10000 mg/kg (Rat; OECD 425: Acute Oral Toxicity: Up-and-Down Procedure; Experimental value; > 5000 mg/kg bodyweight; Rat; Experimental value)   LD50 dermal rabbit   > 10000 mg/kg (Rabbit; Literature study)   LC50 inhalation rat (mg/l)   > 6.8 mg/l/4h (Rat; Experimental value)   Skin corrosion/irritation   : Causes skin irritation.   Serious eye damage/irritation   : Causes skin irritation.   Respiratory or skin sensitisation   : Not classified   Germ cell mutagenicity   : Not classified   : Not classified   Carcinogenicity   : Not classified   : Suspected of causing cancer.  | LD50 dermal rabbit                                 | > 3000 mg/kg (Rabbit)   |
| value; > 5000 mg/kg kodyweight; Rat; Experimental value)  LD50 dermal rabbit  LC50 inhalation rat (mg/l)  Skin corrosion/irritation  Serious eye damage/irritation  Serious eye damage/irritation  Respiratory or skin sensitisation  Germ cell mutagenicity  Carcinogenicity  Carcinogenicity  Carcinogenicity  Suspected of causing cancer.  Cobalt(II) ethylhexanoate (136-52-7)  IARC group  ZB - Possibly carcinogenic to humans  Styrene (100-42-5)  IARC group  ZB - Possibly carcinogenic to humans  Styrene (100-43-86-4)  IARC group  ZB - Possibly carcinogenic to humans  As assonably anticipated to be Human Carcinogen  Carbon black (1333-86-4)  IARC group  ZB - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group  ZB - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group  ZB - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group  ZB - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group  ZB - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group  XB - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group  XB - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group  XB - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group  XB - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group  XB - Possibly carcinogenic to humans  XB - Possibly carc | Titanium Dioxide (13463-67-7)                      |   |
| LC50 inhalation rat (mg/l) > 6.8 mg/l/4h (Rat; Experimental value)  Skin corrosion/irritation : Causes skin irritation.  Respiratory or skin sensitisation : Not classified  Germ cell mutagenicity : Not classified  Carcinogenicity : Suspected of causing cancer.  Cobalt(II) ethylhexanoate (136-52-7)  IARC group   | LD50 oral rat                                      | > 10000 mg/kg (Rat; OECD 425: Acute Oral Toxicity: Up-and-Down Procedure; Experimental value; > 5000 mg/kg bodyweight; Rat; Experimental value) |
| Skin corrosion/irritation : Causes skin irritation.  Serious eye damage/irritation : Causes serious eye irritation.  Respiratory or skin sensitisation : Not classified  Germ cell mutagenicity : Not classified  Carcinogenicity : Suspected of causing cancer.  cobalt(II) ethylhexanoate (136-52-7)  IARC group   | LD50 dermal rabbit                                 | > 10000 mg/kg (Rabbit; Literature study)  |
| Serious eye damage/irritation : Causes serious eye irritation.  Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Suspected of causing cancer.  Cobalt(II) ethylhexanoate (136-52-7)  IARC group   2B - Possibly carcinogenic to humans  Styrene (100-42-5)  IARC group   2B - Possibly carcinogenic to humans  National Toxicology Program (NTP) Status   3 - Reasonably anticipated to be Human Carcinogen  Carbon black (1333-86-4)  IARC group   2B - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group   2B - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group   2B - Possibly carcinogenic to humans  Reproductive toxicity   Not classified  Specific target organ toxicity (single exposure) : May cause respiratory irritation.  Specific target organ toxicity (repeated exposure)  Aspiration hazard : Not classified  Symptoms/injuries after inhalation : May cause respiratory irritation.  Symptoms/injuries after skin contact : Irritation.  Symptoms/injuries after eye contact : Eye irritation.  | LC50 inhalation rat (mg/l)                         | > 6.8 mg/l/4h (Rat; Experimental value)   |
| Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Suspected of causing cancer.  cobalt(II) ethylhexanoate (136-52-7)  IARC group  | Skin corrosion/irritation                          | : Causes skin irritation.   |
| Germ cell mutagenicity : Not classified : Suspected of causing cancer.    Cobalt(II) ethylhexanoate (136-52-7)     IARC group   2B - Possibly carcinogenic to humans   | Serious eye damage/irritation                      | : Causes serious eye irritation.  |
| Carcinogenicity : Suspected of causing cancer.    Cobalt(II) ethylhexanoate (136-52-7)     IARC group   2B - Possibly carcinogenic to humans   | Respiratory or skin sensitisation                  | : Not classified  |
| Cobalt(II) ethylhexanoate (136-52-7)  IARC group  2B - Possibly carcinogenic to humans  Styrene (100-42-5)  IARC group  2B - Possibly carcinogenic to humans  National Toxicology Program (NTP) Status  3 - Reasonably anticipated to be Human Carcinogen  Carbon black (1333-86-4)  IARC group  2B - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group  2B - Possibly carcinogenic to humans  Reproductive toxicity  3 - Not classified  Specific target organ toxicity (single exposure)  Aspiration hazard  Specific target organ toxicity (repeated exposure)  Aspiration hazard  Symptoms/injuries after inhalation  Symptoms/injuries after skin contact  Symptoms/injuries after eye contact  Eye irritation.  | Germ cell mutagenicity                             | : Not classified  |
| IARC group  2B - Possibly carcinogenic to humans  Styrene (100-42-5)  IARC group  2B - Possibly carcinogenic to humans  National Toxicology Program (NTP) Status  3 - Reasonably anticipated to be Human Carcinogen  Carbon black (1333-86-4)  IARC group  2B - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group  2B - Possibly carcinogenic to humans  Reproductive toxicity  Not classified  Specific target organ toxicity (single exposure)  Aspiration hazard  Symptoms/injuries after inhalation  Symptoms/injuries after eye contact  Symptoms/injuries after eye contact  E ye irritation.   | Carcinogenicity                                    | : Suspected of causing cancer.  |
| IARC group 2B - Possibly carcinogenic to humans National Toxicology Program (NTP) Status 3 - Reasonably anticipated to be Human Carcinogen  Carbon black (1333-86-4)  IARC group 2B - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group 2B - Possibly carcinogenic to humans  Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : May cause respiratory irritation.  Specific target organ toxicity (repeated exposure) : Not classified  Symptoms/injuries after inhalation : May cause respiratory irritation.  Symptoms/injuries after eye contact : Irritation.  Symptoms/injuries after eye contact : Eye irritation.  | cobalt(II) ethylhexanoate (136-52-7)               |   |
| IARC group 2B - Possibly carcinogenic to humans National Toxicology Program (NTP) Status 3 - Reasonably anticipated to be Human Carcinogen  Carbon black (1333-86-4)  IARC group 2B - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group 2B - Possibly carcinogenic to humans  Reproductive toxicity : Not classified  Specific target organ toxicity (single exposure) : May cause respiratory irritation.  Specific target organ toxicity (repeated : Not classified  Symptoms/injuries after inhalation : May cause respiratory irritation.  Symptoms/injuries after skin contact : Irritation.  Symptoms/injuries after eye contact : Eye irritation.  | IARC group   | 2B - Possibly carcinogenic to humans  |
| National Toxicology Program (NTP) Status  3 - Reasonably anticipated to be Human Carcinogen  Carbon black (1333-86-4)  IARC group  2B - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group  2B - Possibly carcinogenic to humans  Reproductive toxicity  3 - Reasonably anticipated to be Human Carcinogen  2B - Possibly carcinogenic to humans  3 - Reasonably anticipated to be Human Carcinogen  2B - Possibly carcinogenic to humans  3 - Reasonably anticipated to humans  2B - Possibly carcinogenic to humans  3 - Reasonably anticipated to humans  2B - Possibly carcinogenic to humans  4 - Not classified  5 - Symptoms/injuries after inhalation  5 - May cause respiratory irritation.  5 - Symptoms/injuries after skin contact  5 - Irritation.  5 - Eye irritation.   | Styrene (100-42-5)                                 |   |
| Carbon black (1333-86-4)  IARC group  2B - Possibly carcinogenic to humans  Titanium Dioxide (13463-67-7)  IARC group  2B - Possibly carcinogenic to humans  Reproductive toxicity  3B - Possibly carcinogenic to humans  Reproductive toxicity  3B - Possibly carcinogenic to humans  3B - Possibly carci | IARC group   | 2B - Possibly carcinogenic to humans  |
| Titanium Dioxide (13463-67-7)  IARC group  2B - Possibly carcinogenic to humans  Reproductive toxicity Specific target organ toxicity (single exposure)  Aspiration hazard Symptoms/injuries after eye contact  2B - Possibly carcinogenic to humans  2D - Possibly  | National Toxicology Program (NTP) Status           | 3 - Reasonably anticipated to be Human Carcinogen   |
| Titanium Dioxide (13463-67-7)  IARC group  2B - Possibly carcinogenic to humans  Reproductive toxicity  Specific target organ toxicity (single exposure)  Specific target organ toxicity (repeated exposure)  Aspiration hazard  Symptoms/injuries after inhalation  Symptoms/injuries after eye contact  Symptoms/injuries after eye contact  Eye irritation.   | Carbon black (1333-86-4)                           |   |
| IARC group  Reproductive toxicity Specific target organ toxicity (single exposure)  Specific target organ toxicity (repeated exposure)  Aspiration hazard Symptoms/injuries after inhalation Symptoms/injuries after eye contact  Eye irritation.  2B - Possibly carcinogenic to humans  Not classified  Not classified  Not classified  Not classified  Invitation.  Symptoms/injuries after eye contact  Eye irritation.   | IARC group   | 2B - Possibly carcinogenic to humans  |
| Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : May cause respiratory irritation.  Specific target organ toxicity (repeated exposure) : Not classified  Aspiration hazard : Not classified  Symptoms/injuries after inhalation : May cause respiratory irritation.  Symptoms/injuries after skin contact : Irritation.  Symptoms/injuries after eye contact : Eye irritation.  | Titanium Dioxide (13463-67-7)                      |   |
| Specific target organ toxicity (single exposure) : May cause respiratory irritation.  Specific target organ toxicity (repeated exposure) : Not classified  Aspiration hazard : Not classified  Symptoms/injuries after inhalation : May cause respiratory irritation.  Symptoms/injuries after skin contact : Irritation.  Symptoms/injuries after eye contact : Eye irritation.   | IARC group   | 2B - Possibly carcinogenic to humans  |
| Specific target organ toxicity (repeated exposure)  Aspiration hazard : Not classified  Symptoms/injuries after inhalation : May cause respiratory irritation.  Symptoms/injuries after eye contact : Irritation.  Symptoms/injuries after eye contact : Eye irritation.   | Reproductive toxicity                              | : Not classified  |
| Aspiration hazard : Not classified  Symptoms/injuries after inhalation : May cause respiratory irritation.  Symptoms/injuries after eye contact : Irritation.  Symptoms/injuries after eye contact : Eye irritation.   | Specific target organ toxicity (single exposure)   | : May cause respiratory irritation.   |
| Symptoms/injuries after inhalation : May cause respiratory irritation.  Symptoms/injuries after skin contact : Irritation.  Symptoms/injuries after eye contact : Eye irritation.  | Specific target organ toxicity (repeated exposure) | : Not classified  |
| Symptoms/injuries after skin contact : Irritation. Symptoms/injuries after eye contact : Eye irritation.   | Aspiration hazard                                  | : Not classified  |
| Symptoms/injuries after eye contact : Eye irritation.  | Symptoms/injuries after inhalation                 | : May cause respiratory irritation.   |
| Symptoms/injuries after eye contact : Eye irritation.  | Symptoms/injuries after skin contact               | : Irritation.   |
| SECTION 12: Ecological information   | Symptoms/injuries after eye contact                | : Eye irritation.   |
|  | SECTION 12: Ecological information                 |   |

| 1 | 2 1 |  | To | vi | cit | h |
|---|-----|--|----|----|-----|---|

Threshold limit algae 1

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

| cobalt(II) ethylhexanoate (136-52-7) |  |
|--------------------------------------|--|
| LC50 fish 1                          | 46.51 mg/l (LOEC; ASTM; 96 h; Pimephales promelas; Flow-through system; Fresh water; Read-across)  |
| EC50 Daphnia 1                       | 0.212 mg/l (NOEC; ASTM; 48 h; Ceriodaphnia dubia; Static system; Salt water; Read-across)  |
| LC50 fish 2                          | 54.1 mg/l (LC50; ASTM; 96 h; Pimephales promelas; Flow-through system; Fresh water; Read-across)   |
| EC50 Daphnia 2                       | 0.605 mg/l (LC50; ASTM; 48 h; Ceriodaphnia dubia; Static system; Salt water; Read-across)  |
| Threshold limit algae 1              | 144 μg/l (ErC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Read-across) |
| Threshold limit algae 2              | 32.2 μg/l (NOEC; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Read-across) |
| Methacrylic Acid (79-41-4)           |  |
| LC50 fish 2                          | 85 mg/l (LC50; EPA OTS 797.1400; 96 h; Salmo gairdneri; Flow-through system; Fresh water; Experimental value)                            |
| EC50 Daphnia 2                       | > 130 mg/l (EC50; EPA OTS 797.1300; 48 h; Daphnia magna; Flow-through system; Fresh  |

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Static system; Fresh water; Experimental value)

45 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Selenastrum capricornutum;

water; Experimental value)

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| Carbon black (1333-86-4)      |  |
|-------------------------------|--|
| LC50 fish 1                   | > 1000 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Brachydanio rerio)   |
| EC50 Daphnia 1                | > 5600 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 24 h; Daphnia magna; Static system; Fresh water)                       |
| LC50 fish 2                   | 1000 mg/l (LC0; OECD 203: Fish, Acute Toxicity Test; 96 h; Brachydanio rerio; Semi-static system; Fresh water; Experimental value)         |
| Threshold limit algae 1       | > 10000 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Scenedesmus subspicatus; Static system; Fresh water; Experimental value) |
| Titanium Dioxide (13463-67-7) |  |
| EC50 Daphnia 1                | > 100 mg/l (LC50; Equivalent or similar to OECD 202; 48 h; Daphnia magna; Static system; Fresh water; Weight of evidence)                  |
| Threshold limit algae 1       | 61 mg/l (EC50; Other; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)                               |

#### Persistence and degradability 12.2.

| cobalt(II) ethylhexanoate (136-52-7) |  |  |
|--------------------------------------|--|--|
| Persistence and degradability        | Readily biodegradable in water. No (test)data on mobility of the substance available.  |  |
| Styrene (100-42-5)                   |  |  |
| Persistence and degradability        | Readily biodegradable in water. Non degradable in the soil. Low potential for adsorption in soil. Photodegradation in the air. |  |
| Chemical oxygen demand (COD)         | 2.80 g O₂/g substance  |  |
| ThOD                                 | 3.07 g O₂/g substance  |  |
| BOD (% of ThOD)                      | 0.42   |  |
| Methacrylic Acid (79-41-4)           |  |  |
| Persistence and degradability        | Readily biodegradable in water. Low potential for adsorption in soil. Photodegradation in the air.                             |  |
| Biochemical oxygen demand (BOD)      | 0.89 g O₂/g substance  |  |
| ThOD                                 | 1.67 g O₂/g substance  |  |
| BOD (% of ThOD)                      | 0.5329 (Calculated value)  |  |
| Carbon black (1333-86-4)             |  |  |
| Persistence and degradability        | Biodegradability: not applicable. Biodegradability in soil: not applicable. Adsorbs into the soil.                             |  |
| ThOD                                 | Not applicable   |  |
| Titanium Dioxide (13463-67-7)        |  |  |
| Persistence and degradability        | Biodegradability: not applicable. Low potential for mobility in soil.  |  |
| Biochemical oxygen demand (BOD)      | Not applicable   |  |
| Chemical oxygen demand (COD)         | Not applicable   |  |
| ThOD                                 | Not applicable   |  |

#### 12.3. **Bioaccumulative potential**

| VE-SR-RED                            |   |
|--------------------------------------|---|
| Bioaccumulative potential            | No test data available.   |
| cobalt(II) ethylhexanoate (136-52-7) |   |
| BCF fish 1                           | 1.2 (BCF; 131 days; Seriola quinqueradiata; Static system; Salt water; Read-across)                     |
| Bioaccumulative potential            | Low potential for bioaccumulation (BCF < 500).  |
| Styrene (100-42-5)                   |   |
| BCF fish 1                           | 35.5 (BCF)  |
| Log Pow                              | 2.96 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 25 °C) |
| Bioaccumulative potential            | Low potential for bioaccumulation (BCF < 500).  |
| Methacrylic Acid (79-41-4)           |   |
| BCF other aquatic organisms 1        | 3 (BCF)   |
| Log Pow                              | 0.93 (Experimental value; 22 °C)  |
| Bioaccumulative potential            | Low potential for bioaccumulation (Log Kow < 4).  |

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| Carbon black (1333-86-4)      |  |  |
|-------------------------------|--|--|
| Bioaccumulative potential     | Bioaccumulative potential Not bioaccumulative. |  |
| Titanium Dioxide (13463-67-7) |  |  |
| Bioaccumulative potential     | Not bioaccumulative.                           |  |

#### 12.4. **Mobility in soil**

| cobalt(II) ethylhexanoate (136-52-7) |  |
|--------------------------------------|--|
| Surface tension                      | 0.064 N/m (20 °C; 1 g/l)                                 |
| Styrene (100-42-5)                   |  |
| Surface tension                      | 0.032 N/m (19 °C)  |
| Log Koc                              | Koc,352; Estimated value; log Koc; 2.55; Estimated value |
| Methacrylic Acid (79-41-4)           |  |
| Surface tension                      | 0.0659 N/m (20 °C; 1.01 g/l)                             |
| Carbon black (1333-86-4)             |  |
| Ecology - soil                       | Not toxic to plants. Not toxic to animals.               |

#### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

# **SECTION 13: Disposal considerations**

#### Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Additional information : Flammable vapours may accumulate in the container.

# **SECTION 14: Transport information**

# **Department of Transportation (DOT)**

In accordance with DOT

Transport document description : UN1866 Resin solution (flammable), 3, III

UN-No.(DOT) : UN1866 Proper Shipping Name (DOT) : Resin solution flammable

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : III - Minor Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 173 DOT Packaging Bulk (49 CFR 173.xxx)

DOT Special Provisions (49 CFR 172.102)

: B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable

B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672)

T2 - 1.5 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / (1 + a (tr - tf)) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling

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DOT Packaging Exceptions (49 CFR 173.xxx) : 150 DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel

Emergency Response Guide (ERG) Number : 127

Other information : No supplementary information available.

#### **TDG**

No additional information available

#### Transport by sea

No additional information available

#### Air transport

No additional information available

# **SECTION 15: Regulatory information**

## 15.1. US Federal regulations

| VE-SR-RED   |                                 |  |  |  |
|---|---------------------------------|--|--|--|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |                                 |  |  |  |
| SARA Section 311/312 Hazard Classes                                       | Fire hazard                     |  |  |  |
|   | Immediate (acute) health hazard |  |  |  |
|   | Delayed (chronic) health hazard |  |  |  |

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Styrene CAS No 100-42-5 25 - 40%

# cobalt(II) ethylhexanoate (136-52-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

# Styrene (100-42-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

CERCLA RQ 1000 lb

# Methacrylic Acid (79-41-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

# Carbon black (1333-86-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Titanium Dioxide (13463-67-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

# 15.2. International regulations

# CANADA

| VE-SR-RED            |   |  |
|----------------------|---|--|
| WHMIS Classification | Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision B - Toxic material causing other toxic effects |  |

# **EU-Regulations**

No additional information available

# **National regulations**

# Styrene (100-42-5)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)

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# Carbon black (1333-86-4)

Listed on IARC (International Agency for Research on Cancer)

# Titanium Dioxide (13463-67-7)

Listed on IARC (International Agency for Research on Cancer)

#### 15.3. US State regulations

| Carbon black (1333-86                                    | i-4)   |   |   |                                      |
|--|--|---|---|--------------------------------------|
| U.S California -<br>Proposition 65 -<br>Carcinogens List | U.S California -<br>Proposition 65 -<br>Developmental Toxicity | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity -<br>Female | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity -<br>Male | Non-significant risk<br>level (NSRL) |
| Yes  | No   | No  | No  |                                      |
| Titanium Dioxide (1346                                   | 63-67-7)   |   |   |                                      |
| U.S California -<br>Proposition 65 -<br>Carcinogens List | U.S California -<br>Proposition 65 -<br>Developmental Toxicity | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity -           | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity -         | Non-significant risk level (NSRL)    |

Female

No

# Styrene (100-42-5)

Yes

U.S. - New Jersey - Right to Know Hazardous Substance List

No

U.S. - Pennsylvania - RTK (Right to Know) List

# Methacrylic Acid (79-41-4)

U.S. - New Jersey - Right to Know Hazardous Substance List

# Carbon black (1333-86-4)

U.S. - New Jersey - Right to Know Hazardous Substance List

#### Titanium Dioxide (13463-67-7)

U.S. - New Jersey - Right to Know Hazardous Substance List

# **SECTION 16: Other information**

Other information

: Disclaimer: This SDS to the best of our knowledge conforms to the requirements of OSHA 20 CFR 1910.1200 and summarizes the health and safety hazard information and general guidance on how to safely handle the material at the date of issue. Each user must review the SDS in the context of how the product will be handled and used in the workplace.

Male

No

# Full text of H-statements:

| H226 | Flammable liquid and vapour                  |
|------|--|
| H227 | Combustible liquid                           |
| H302 | Harmful if swallowed                         |
| H304 | May be fatal if swallowed and enters airways |
| H311 | Toxic in contact with skin                   |
| H315 | Causes skin irritation                       |
| H319 | Causes serious eye irritation                |
| H335 | May cause respiratory irritation             |
| H351 | Suspected of causing cancer                  |

NFPA health hazard

 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard

3 - Liquids and solids that can be ignited under almost all ambient conditions.

NFPA reactivity

 2 - Normally unstable and readily undergo violent decomposition but do not detonate. Also: may react violently with water or may form potentially explosive mixtures with water. 2 2

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HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 3 Serious Hazard - Materials capable of ignition under almost all normal temperature

conditions. Includes flammable liquids with flash points below 73 F and boiling points above

100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB & IC)

Physical : 2 Moderate Hazard - Materials that are unstable and may undergo violent chemical changes at

normal temperature and pressure with low risk for explosion. Materials may react violently with

water or form peroxides upon exposure to air.

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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