

## Safety Data Sheet CLEARVAL-US-SDS

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

Issue date: 04/18/2017 Revision date: 08/29/2019 Supersedes: 05/25/2018 Version: 4.0

### **SECTION 1: Identification**

Identification

Product form : Mixture

: CLEAR #1 UV RESISTANT CLEARCOAT AEROSOL Trade name

**UP Number UP0796** 

Recommended use and restrictions on use

Use of the substance/mixture : Coatings and paints, thinners, paint removers

: Topcoat Recommended use

#### 1.3. Supplier

Supplier

U-POL US Inc 108 Commerce Way

Easton, PA 18040 - United States T 1-800-340-7824 - F 1-800-787-5150

technicalsupport@u-pol.com - www.u-pol.com

#### **Emergency telephone number**

**Emergency number** : CHEMTREC - 1-800-424-9300

### **SECTION 2: Hazard(s) identification**

#### Classification of the substance or mixture

### **GHS US classification**

Flammable aerosol Category 1 Gases under pressure Liquefied gas Skin corrosion/irritation Category 2

Serious eve damage/eve irritation Category 1

Skin sensitization, Category 1

Specific target organ toxicity — Single exposure, Category May cause drowsiness or dizziness

3, Narcosis

Extremely flammable aerosol

Contains gas under pressure; may explode if heated

Causes skin irritation Causes serious eve damage May cause an allergic skin reaction

#### 2.2. GHS Label elements, including precautionary statements

### **GHS US labeling**

Hazard pictograms (GHS US)









Signal word (GHS US) : Danger

Extremely flammable aerosol Hazard statements (GHS US)

Contains gas under pressure; may explode if heated

Causes skin irritation

May cause an allergic skin reaction Causes serious eye damage May cause drowsiness or dizziness

Precautionary statements (GHS US) Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

Avoid breathing vapors, fume, spray, Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

Wear eye protection, protective clothing, protective gloves.

If on skin: Wash with plenty of water.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

EN (English US) SDS ID: CLEARVAL-US-SDS 07/01/2021 Page 1

## Safety Data Sheet

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

Call a doctor if you feel unwell.

If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Dispose of contents/container to hazardous or special waste collection point, in accordance

with local, regional, national and/or international regulation.

#### 2.3. Other hazards which do not result in classification

#### 2.4. **Unknown acute toxicity (GHS US)**

9.81% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapors))

## **SECTION 3: Composition/Information on ingredients**

### **Substances**

Not applicable

#### 3.2. **Mixtures**

| Name   | Product identifier | %      | GHS US classification  |
|--|--------------------|--------|--|
| n-butyl acetate  | (CAS-No.) 123-86-4 | 5 – 23 | Flam. Liq. 3, H226<br>STOT SE 3, H336  |
| cyclohexanone  | (CAS-No.) 108-94-1 | 5 – 23 | Flam. Liq. 3, H226<br>Acute Tox. 4 (Oral), H302<br>Acute Tox. 4 (Dermal), H312<br>Acute Tox. 4 (Inhalation), H332<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318 |
| ethyl methyl ketone  | (CAS-No.) 78-93-3  | 5 – 23 | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319<br>STOT SE 3, H336  |
| methyl acetate   | (CAS-No.) 79-20-9  | 5 – 23 | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319<br>STOT SE 3, H336  |
| heptan-2-one   | (CAS-No.) 110-43-0 | < 5    | Flam. Liq. 3, H226<br>Acute Tox. 4 (Oral), H302<br>Acute Tox. 4 (Inhalation), H332<br>STOT SE 3, H336  |
| reaction mass of $\alpha$ -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- $\omega$ -hydroxypoly(oxyethylene) and $\alpha$ -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- $\omega$ -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene) |                    | < 5    | Skin Sens. 1A, H317<br>Aquatic Chronic 2, H411   |

Full text of hazard classes and H-statements : see section 16

### **SECTION 4: First-aid measures**

### **Description of first aid measures**

: Call a poison center/doctor/physician if you feel unwell. First-aid measures general

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs:

Get medical advice/attention.

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to First-aid measures after eye contact

do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May cause drowsiness or dizziness.

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Serious damage to eyes.

### Immediate medical attention and special treatment, if necessary

Treat symptomatically.

07/01/2021 SDS ID: CLEARVAL-US-SDS EN (English US) 2/13

## Safety Data Sheet

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

### **SECTION 5: Fire-fighting measures**

### Suitable (and unsuitable) extinguishing media

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

#### Specific hazards arising from the chemical 5.2.

Fire hazard : Extremely flammable aerosol. Reactivity Extremely flammable aerosol.

#### 5.3. Special protective equipment and precautions for fire-fighters

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**

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

#### 6.1.1. For non-emergency personnel

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

dust/fume/gas/mist/vapors/spray. 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.

### Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.

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**

### Precautions for safe handling

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

smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. Wear personal protective

equipment.

Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed Hygiene measures out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands

after handling the product.

### Conditions for safe storage, including any incompatibilities

Protect from sunlight. Store in a well-ventilated place. Do not expose to temperatures Storage conditions

exceeding 50 °C/122 °F. Store locked up. Keep container tightly closed. Keep cool.

Storage temperature

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

## **Control parameters**

| methyl acetate (79-20-9) |                      |   |
|--------------------------|----------------------|---|
| ACGIH                    | Local name           | Methyl acetate  |
| ACGIH                    | ACGIH OEL TWA [ppm]  | 200 ppm   |
| ACGIH                    | ACGIH OEL STEL [ppm] | 250 ppm   |
| ACGIH                    | Remark (ACGIH)       | TLV® Basis: Headache; dizziness; nausea; eye dam (degeneration of ganglion cells in the retina) |
| ACGIH                    | Regulatory reference | ACGIH 2021  |
| OSHA                     | OSHA PEL (TWA) [1]   | 610 mg/m³   |
| OSHA                     | OSHA PEL (TWA) [2]   | 200 ppm   |

SDS ID: CLEARVAL-US-SDS 07/01/2021 EN (English US) 3/13

# Safety Data Sheet

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

| methyl acetate (79-20-9)   |  |   |
|--|--|---|
| OSHA   | Regulatory reference (US-OSHA)                 | OSHA Annotated Table Z-1  |
| reaction mass of α-3-(3-(2<br>benzotriazol-2-yl)-5-tert-b<br>hydroxyphenyl)propionyl | utyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-ben: | yl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-<br>zotriazol-2-yl)-5-tert-butyl-4-                    |
| Not applicable   |  |   |
| ethyl methyl ketone (78-93   | 3-3)   |   |
| ACGIH  | Local name                                     | Methyl ethyl ketone (MEK)   |
| ACGIH  | ACGIH OEL TWA [ppm]                            | 200 ppm   |
| ACGIH  | ACGIH OEL STEL [ppm]                           | 300 ppm   |
| ACGIH  | Remark (ACGIH)                                 | TLV® Basis: URT irr; CNS & PNS impair. Notations: BEI   |
| ACGIH  | Regulatory reference                           | ACGIH 2021  |
| OSHA   | OSHA PEL (TWA) [1]                             | 590 mg/m³   |
| OSHA   | OSHA PEL (TWA) [2]                             | 200 ppm   |
| OSHA   | Regulatory reference (US-OSHA)                 | OSHA Annotated Table Z-1  |
| n-butyl acetate (123-86-4)   |  |   |
| ACGIH  | Local name                                     | n-Butyl acetate   |
| ACGIH  | ACGIH OEL TWA [ppm]                            | 50 ppm  |
| ACGIH  | ACGIH OEL STEL [ppm]                           | 150 ppm   |
| ACGIH  | Remark (ACGIH)                                 | TLV® Basis: Eye & URT irr   |
| ACGIH  | Regulatory reference                           | ACGIH 2021  |
| OSHA   | OSHA PEL (TWA) [1]                             | 710 mg/m³   |
| OSHA   | OSHA PEL (TWA) [2]                             | 150 ppm   |
| OSHA   | Regulatory reference (US-OSHA)                 | OSHA Annotated Table Z-1  |
| heptan-2-one (110-43-0)  |  | -   |
| ACGIH  | Local name                                     | Methyl n-amyl ketone  |
| ACGIH  | ACGIH OEL TWA [ppm]                            | 50 ppm  |
| ACGIH  | Remark (ACGIH)                                 | TLV® Basis: Eye & skin irr  |
| ACGIH  | Regulatory reference                           | ACGIH 2021  |
| OSHA   | OSHA PEL (TWA) [1]                             | 465 mg/m³   |
| OSHA   | OSHA PEL (TWA) [2]                             | 100 ppm   |
| OSHA   | Regulatory reference (US-OSHA)                 | OSHA Annotated Table Z-1  |
| cyclohexanone (108-94-1)   |  | -   |
| ACGIH  | Local name                                     | Cyclohexanone   |
| ACGIH  | ACGIH OEL TWA [ppm]                            | 20 ppm  |
| ACGIH  | ACGIH OEL STEL [ppm]                           | 50 ppm  |
| ACGIH  | Remark (ACGIH)                                 | TLV® Basis: Eye & URT irr. Notations: Skin; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans) |
| ACGIH  | Regulatory reference                           | ACGIH 2021  |
| OSHA   | OSHA PEL (TWA) [1]                             | 200 mg/m³   |
| OSHA   | OSHA PEL (TWA) [2]                             | 50 ppm  |
| OSHA   | Regulatory reference (US-OSHA)                 | OSHA Annotated Table Z-1  |

## 8.2. Appropriate engineering controls

Appropriate engineering controls

07/01/2021 EN (English US) SDS ID: CLEARVAL-US-SDS 4/13

<sup>:</sup> Ensure good ventilation of the work station.

## Safety Data Sheet

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

Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

### 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

### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid Appearance : aerosol. Color : Colorless Odor characteristic Odor threshold : No data available : No data available рΗ Melting point No data available Freezing point : No data available : No data available Boiling point

Flash point : -41 °C

Relative evaporation rate (butyl acetate=1) : No data available

Flammability (solid, gas) : Extremely flammable aerosol.

Vapor pressure : No data available Relative vapor density at 20 °C : No data available Relative density : No data available Density : 0.931 g/cm<sup>3</sup> Solubility No data available Partition coefficient n-octanol/water (Log Pow) : No data available : No data available Auto-ignition temperature Decomposition temperature : No data available : No data available No data available Viscosity, kinematic Viscosity, dynamic No data available **Explosion limits** : No data available Explosive properties : No data available Oxidizing properties : No data available

## 9.2. Other information

As Packaged Regulatory VOC : 772 g/l (6.4 lb/gal)
As Packaged Actual VOC : 708 g/l (5.9 lb/gal)
As Applied Regulatory VOC : 772 g/l (6.4 lb/gal)
As Applied Actual VOC : 708 g/l (5.9 lb/gal)

07/01/2021 EN (English US) SDS ID: CLEARVAL-US-SDS 5/13

## Safety Data Sheet

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

 Water Content
 0 wt%

 Volatiles
 : 84.4 wt%

 % EPA HAPS
 : 13.4 wt%

 Percent Solids
 : 15.61 wt%

 Percent Solids
 : 11.88 vol %

Maximum Incremental Reactivity (MIR) : 0.79

MIR EPA Aerosol Category : Clear Coating - CCP 1.5

MIR CARB Aerosol Category : Clear Coating - General Coatings - CCP 0.85

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Extremely flammable aerosol.

### 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) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| Unknown acute toxicity (GHS US) | 9.81% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapors))  |
|---------------------------------|---|
| methyl acetate (79-20-9)        |   |
| LD50 oral rat                   | 6482 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity)                                       |
| LD50 dermal rat                 | > 2000 mg/kg body weight Animal: rat, Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: OECD Guideline 402 (Acute Dermal Toxicity) |
| LC50 Inhalation - Rat           | 49 mg/l   |
| ATE US (oral)                   | 6482 mg/kg body weight  |
| ATE US (vapors)                 | 49 mg/l/4h  |
| ATE US (dust, mist)             | 49 mg/l/4h  |

| benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxyethylene) |   |  |
|--|---|--|
| LD50 oral rat  | > 5000 mg/kg (OECD Guideline No. 401 (equivalent to Annex V), limit test, rat, male/female) |  |
| LD50 dermal rat  | > 2000 mg/kg (OECD Guideline No. 402 (equivalent to Annex V), limit test, rat, male/female) |  |
| LC50 Inhalation - Rat  | 5800 mg/l (OECD Guideline 403, 14d, rat)  |  |
| ATE US (vapors)  | 5800 mg/l/4h  |  |
| ATE US (dust, mist)  | 5800 mg/l/4h  |  |
| ethyl methyl ketone (78-93-3)  |   |  |
| 1550 1 /   | 0400 mm/lm b a bossa label /Emphalametra a similar to OEOD 400 Dat Mala / famola Dand       |  |

| LD50 oral rat      | 2193 mg/kg body weight (Equivalent or similar to OECD 423, Rat, Male / female, Read-across, Oral) |
|--------------------|---|
| LD50 dermal rabbit | > 10 ml/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Male, Experimental value, Dermal)    |
| ATE US (oral)      | 2193 mg/kg body weight  |

07/01/2021 EN (English US) SDS ID: CLEARVAL-US-SDS 6/13

# Safety Data Sheet

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

| n-butyl acetate (123-86-4)                                     |   |
|--|---|
| LD50 oral rat  | 10760 – 12789 mg/kg body weight (Equivalent or similar to OECD 423, Rat, Male / female,   |
|  | Experimental value, Oral)   |
| LD50 dermal rabbit   | 14112 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Male / female, Experimental value, Dermal)                                  |
| LC50 Inhalation - Rat [ppm]                                    | 390 ppm/4h  |
| ATE US (oral)  | 10760 mg/kg body weight   |
| ATE US (dermal)  | 14112 mg/kg body weight   |
| ATE US (gases)   | 390 ppmV/4h   |
| heptan-2-one (110-43-0)  |   |
| LD50 oral rat  | ≈ 1600 mg/kg body weight Animal: rat  |
| LD50 dermal rat  | > 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)) |
| LC50 Inhalation - Rat  | > 16.7 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation))  |
| ATE US (oral)  | 500 mg/kg body weight   |
| ATE US (gases)   | 4500 ppmV/4h  |
| ATE US (vapors)  | 11 mg/l/4h  |
| ATE US (dust, mist)  | 1.5 mg/l/4h   |
| cyclohexanone (108-94-1)                                       |   |
| LD50 oral rat  | 1890 mg/kg body weight (BASF test, Rat, Experimental value, Oral, 7 day(s))   |
| LD50 dermal rabbit   | 1100 mg/kg (BRENNTAG test)  |
| LC50 Inhalation - Rat  | > 6.2 mg/l air Animal: rat  |
| ATE US (oral)  | 1890 mg/kg body weight  |
| ATE US (dermal)  | 1100 mg/kg body weight  |
| ATE US (gases)   | 4500 ppmV/4h  |
| ATE US (vapors)  | 11 mg/l/4h  |
| ATE US (dust, mist)  | 1.5 mg/l/4h   |
| Skin corrosion/irritation                                      | : Causes skin irritation.   |
| Serious eye damage/irritation                                  | : Causes serious eye damage.  |
| Respiratory or skin sensitization                              | : May cause an allergic skin reaction.  |
| Germ cell mutagenicity   | : Not classified  |
| Carcinogenicity  | : Not classified  |
| 3  |   |
| cyclohexanone (108-94-1)                                       |   |
| IARC group   | 3 - Not classifiable  |
| Reproductive toxicity  | : Not classified  |
| STOT-single exposure   | : May cause drowsiness or dizziness.  |
| - '  | . Thay saddo drottomoso of dizzmoso.  |
| methyl acetate (79-20-9)                                       |   |
| STOT-single exposure   | May cause drowsiness or dizziness.  |
| ethyl methyl ketone (78-93-3)                                  |   |
| STOT-single exposure   | May cause drowsiness or dizziness.  |
| n-butyl acetate (123-86-4)                                     |   |
| STOT-single exposure   | May cause drowsiness or dizziness.  |
| heptan-2-one (110-43-0)  |   |
| STOT-single exposure   | May cause drowsiness or dizziness.  |
| STOT-repeated exposure   | : Not classified  |
|  |   |
| methyl acetate (79-20-9)                                       |   |
| methyl acetate (79-20-9)  LOAEC (inhalation,rat,vapor,90 days) | 2000 mg/l   |

 07/01/2021
 EN (English US)
 SDS ID: CLEARVAL-US-SDS
 7/13

## Safety Data Sheet

cyclohexanone (108-94-1)

Persistence and degradability

ethyl methyl ketone (78-93-3) Persistence and degradability

Biochemical oxygen demand (BOD)

Chemical oxygen demand (COD)

ThOD

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

| Cyclonic Authoric (100 54 1)   |  |
|--|--|
| NOAEL (oral,rat,90 days)   | 143 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)   |
| Aspiration hazard  | : Not classified   |
| Viscosity, kinematic   | : No data available  |
| Symptoms/effects   | : May cause drowsiness or dizziness.   |
| Symptoms/effects after skin contact  | : Irritation. May cause an allergic skin reaction.   |
| Symptoms/effects after eye contact   | : Serious damage to eyes.  |
| July 10 money and a contract   | - Concac damage to cyce.   |
| SECTION 12: Ecological informate   | tion   |
| 2.1. Toxicity  |  |
| Ecology - general  | : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.   |
| methyl acetate (79-20-9)   |  |
| LC50 - Fish [1]  | 250 – 350 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)  |
| EC50 - Crustacea [1]   | 1026.7 mg/l Test organisms (species): Daphnia magna  |
| reaction mass of α-3-(3-(2H-benzotriazo<br>benzotriazol-2-yl)-5-tert-butyl-4-hydroxy<br>hydroxyphenyl)propionyloxypoly(oxyet | ol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-<br>/phenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-<br>hylene) |
| LC50 - Fish [1]  | 2.8 mg/l (96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Nominal concentration)  |
| EC50 - Crustacea [1]   | 4 mg/l (48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)  |
| ErC50 algae  | > 100 mg/l (72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)  |
| ethyl methyl ketone (78-93-3)  |  |
| LC50 - Fish [1]  | 2993 mg/l Test organisms (species): Pimephales promelas  |
| EC50 - Crustacea [1]   | 308 mg/l Test organisms (species): Daphnia magna   |
| ErC50 algae  | 1972 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)                           |
| n-butyl acetate (123-86-4)   |  |
| LC50 - Fish [1]  | 18 mg/l Test organisms (species): Pimephales promelas  |
| EC50 - Crustacea [1]   | 44 mg/l Test organisms (species): Daphnia sp.  |
| LC50 - Fish [2]  | 62 mg/l (Leuciscus idus, static system)  |
| NOEC (chronic)   | 23 mg/l Test organisms (species): Daphnia magna Duration: '21 d'   |
| NOEC chronic crustacea   | 23 mg/l  |
| heptan-2-one (110-43-0)  |  |
| LC50 - Fish [1]  | 131 mg/l Test organisms (species): Pimephales promelas   |
| EC50 - Crustacea [1]   | > 90.1 mg/l Test organisms (species): Daphnia magna  |
| cyclohexanone (108-94-1)   |  |
| LC50 - Fish [1]  | 527 – 732 mg/l Test organisms (species): Pimephales promelas   |
| EC50 - Crustacea [1]   | > 100 mg/l Test organisms (species): Daphnia magna   |
| ErC50 algae  | > 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Read-across, GLP)   |
| 12.2. Persistence and degradability  |  |
| methyl acetate (79-20-9)   |  |

07/01/2021 EN (English US) SDS ID: CLEARVAL-US-SDS 8/13

Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily

Readily biodegradable in water.

biodegradable in water.

2.03 g O₂/g substance

2.31 g O₂/g substance

2.44 g O₂/g substance

# Safety Data Sheet

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

| n-butyl acetate (123-86-4)      |  |  |
|---------------------------------|--|--|
| Persistence and degradability   | Readily biodegradable in water.                            |  |
| ThOD                            | 2.21 g O₂/g substance                                      |  |
| BOD (% of ThOD)                 | 0.46   |  |
| heptan-2-one (110-43-0)         |  |  |
| Persistence and degradability   | Readily biodegradable in water.                            |  |
| BOD (% of ThOD)                 | 0.44   |  |
| cyclohexanone (108-94-1)        |  |  |
| Persistence and degradability   | Biodegradable in the soil. Readily biodegradable in water. |  |
| Biochemical oxygen demand (BOD) | 1.232 g O₂/g substance                                     |  |
| Chemical oxygen demand (COD)    | 2.605 g O₂/g substance                                     |  |
| ThOD                            | 2.605 g O₂/g substance                                     |  |

## 12.3. Bioaccumulative potential

| methyl acetate (79-20-9)   |   |  |
|--|---|--|
| BCF - Fish [1]   | < 1 (Pisces, Literature study)  |  |
| Partition coefficient n-octanol/water (Log Pow)  | 0.18 (Experimental value, 20 °C)  |  |
| Bioaccumulative potential  | Low potential for bioaccumulation (Log Kow < 4).  |  |
| reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene) |   |  |
| BCF - Fish [1]   | 2658 – 3430 (502 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value)          |  |
| Partition coefficient n-octanol/water (Log Pow)  | 4.6 (Experimental value, Equivalent or similar to OECD 117, 25 °C)                                      |  |
| ethyl methyl ketone (78-93-3)  |   |  |
| Partition coefficient n-octanol/water (Log Pow)  | 0.3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 40 °C)         |  |
| Bioaccumulative potential  | Low potential for bioaccumulation (Log Kow < 4).  |  |
| n-butyl acetate (123-86-4)   |   |  |
| BCF - Fish [1]   | 15.3 (Calculated value)   |  |
| Partition coefficient n-octanol/water (Log Pow)  | 2.3 (Test data, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)                  |  |
| Bioaccumulative potential  | Low potential for bioaccumulation (BCF < 500).  |  |
| heptan-2-one (110-43-0)  |   |  |
| Bioaccumulative potential  | Low potential for bioaccumulation (Log Kow < 4).  |  |
| cyclohexanone (108-94-1)   |   |  |
| BCF - Other aquatic organisms [1]  | 2.4 (QSAR)  |  |
| Partition coefficient n-octanol/water (Log Pow)  | 0.86 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C) |  |
| Bioaccumulative potential  | Low potential for bioaccumulation (Log Kow < 4).  |  |

## 12.4. Mobility in soil

| methyl acetate (79-20-9)                                      |  |  |
|---|--|--|
| Surface tension   | 24 mN/m (20 °C)  |  |
| Organic Carbon Normalized Adsorption<br>Coefficient (Log Koc) | 0.18 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP) |  |
| Ecology - soil  | Highly mobile in soil.   |  |
| ethyl methyl ketone (78-93-3)                                 |  |  |
| Surface tension   | 0.024 N/m (20 °C)  |  |
| Organic Carbon Normalized Adsorption<br>Coefficient (Log Koc) | 1.53 (log Koc, Calculated value)   |  |
| Ecology - soil  | Highly mobile in soil. Slightly harmful to plants.   |  |
| n-butyl acetate (123-86-4)                                    |  |  |
| Surface tension   | 0.0163 N/m (20 °C)   |  |

07/01/2021 EN (English US) SDS ID: CLEARVAL-US-SDS 9/13

## Safety Data Sheet

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

| n-butyl acetate (123-86-4)                                    |  |  |
|---|--|--|
| Organic Carbon Normalized Adsorption<br>Coefficient (Log Koc) | 1.268 – 1.844 (log Koc, SRC PCKOCWIN v2.0, QSAR)     |  |
| Ecology - soil  | Low potential for adsorption in soil.                |  |
| heptan-2-one (110-43-0)                                       |  |  |
| Surface tension   | 0.0591 N/m (21.6 °C, EU Method A.5: Surface tension) |  |
| Organic Carbon Normalized Adsorption<br>Coefficient (Log Koc) | 1.45 (log Koc, EU Method C.19, Experimental value)   |  |
| Ecology - soil  | Highly mobile in soil.                               |  |
| cyclohexanone (108-94-1)                                      |  |  |
| Surface tension   | 0.034 N/m (20 °C)                                    |  |
| Organic Carbon Normalized Adsorption<br>Coefficient (Log Koc) | 1.18 (log Koc, SRC PCKOCWIN v1.66, Calculated value) |  |
| Ecology - soil  | Highly mobile in soil.                               |  |

### 12.5. Other adverse effects

### **SECTION 13: Disposal considerations**

13.1. Disposal methods

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

### **SECTION 14: Transport information**

### **Department of Transportation (DOT)**

In accordance with DOT

Transport document description (DOT) : UN1950 Aerosols, 2.1

UN-No.(DOT) : UN1950
Proper Shipping Name (DOT) : Aerosols

Class (DOT) : 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115

Hazard labels (DOT) : 2.1 - Flammable gas



DOT Packaging Non Bulk (49 CFR 173.xxx) : None DOT Packaging Bulk (49 CFR 173.xxx) : None

DOT Special Provisions (49 CFR 172.102) : N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.

DOT Packaging Exceptions (49 CFR 173.xxx) : 306
DOT Quantity Limitations Passenger aircraft/rail : 75 kg
(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 150 kg

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.

DOT Vessel Stowage Other : 25 - Protected from sources of heat,87 - Stow "separated from" Class 1 (explosives) except

Division 14,126 - Segregation same as for Class 9, miscellaneous hazardous materials

Emergency Response Guide (ERG) Number : 120

Other information : No supplementary information available.

**Transportation of Dangerous Goods** 

Transport document description (TDG) : UN1950 AEROSOLS (flammable), 2.1

UN-No. (TDG) : UN1950

07/01/2021 EN (English US) SDS ID: CLEARVAL-US-SDS 10/13

## Safety Data Sheet

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

: AEROSOLS Proper Shipping Name (TDG)

**TDG Primary Hazard Classes** : 2.1 - Class 2.1 - Flammable Gas

80 - Despite section 1.17 of Part 1 (Coming into Force, Repeal, Interpretation, General **TDG Special Provisions** Provisions and Special Cases), a person must not offer for transport or transport these

dangerous goods unless they are in a means of containment that is in compliance with the requirements for transporting gases in Part 5 (Means of Containment), 107 - (1) These Regulations, except for Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases) and Part 2 (Classification), do not apply to the handling, offering for transport or transporting of UN1950, AEROSOLS, and UN2037, GAS CARTRIDGES, that contain dangerous goods included in Class 2.1 or Class 2.2 and that are transported on a road vehicle, a railway vehicle or a vessel on a domestic voyage, if the aerosols or gas cartridges

have a capacity less than or equal to 50 mL.

(2) Subsection (1) does not apply to self-defence spray. Explosive Limit and Limited Quantity Index : 1 L

Passenger Carrying Road Vehicle or Passenger : 75 L

Carrying Railway Vehicle Index

#### Transport by sea

Transport document description (IMDG) : UN 1950 AEROSOLS, 2.1

UN-No. (IMDG) : 1950 Proper Shipping Name (IMDG) : AEROSOLS Class (IMDG) : 2 - Gases Limited quantities (IMDG) : SP277

#### Air transport

Transport document description (IATA) : UN 1950 Aerosols, flammable, 2.1

UN-No. (IATA)

Proper Shipping Name (IATA) : Aerosols, flammable

Class (IATA) : 2 - Gases

### **SECTION 15: Regulatory information**

### 15.1. US Federal regulations

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

### methyl acetate (79-20-9)

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

reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2Hbenzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4hydroxyphenyl)propionyloxypoly(oxyethylene)

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

**EPA TSCA Regulatory Flag** FRI - FRI - indicates a polymeric substance containing no free-radical initiator in its Inventory

name but is considered to cover the designated polymer made with any free-radical initiator

regardless of the amount used.

PMN - PMN - indicates a commenced PMN substance.

XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting

Rule, (40 CFR 711).

ethyl methyl ketone (78-93-3)

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

Listed on EPA Hazardous Air Pollutant (HAPS)

Listed on EPA Hazardous Air Pollutant (HAPS)

5000 lb **CERCLA RQ** 

n-butyl acetate (123-86-4)

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

CERCLA RQ 5000 lb

heptan-2-one (110-43-0)

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

07/01/2021 EN (English US) SDS ID: CLEARVAL-US-SDS 11/13

## Safety Data Sheet

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

| cyclohexanone (108-94-1)  |         |  |
|---|---------|--|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |         |  |
| CERCLA RQ   | 5000 lb |  |

#### 15.2. International regulations

#### **CANADA**

### methyl acetate (79-20-9)

Listed on the Canadian DSL (Domestic Substances List)

reaction mass of  $\alpha$ -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- $\omega$ -hydroxypoly(oxyethylene) and  $\alpha$ -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- $\omega$ -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

Listed on the Canadian DSL (Domestic Substances List)

### ethyl methyl ketone (78-93-3)

Listed on the Canadian DSL (Domestic Substances List)

### n-butyl acetate (123-86-4)

Listed on the Canadian DSL (Domestic Substances List)

### heptan-2-one (110-43-0)

Listed on the Canadian DSL (Domestic Substances List)

### cyclohexanone (108-94-1)

Listed on the Canadian DSL (Domestic Substances List)

### **EU-Regulations**

No additional information available

### **National regulations**

No additional information available

### 15.3. US State regulations



This product can expose you to Ethylbenzene, which is known to the State of California to cause cancer, and toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

| Component              | Carcinogenicity | Developmental toxicity | Reproductive toxicity male | Reproductive toxicity female | No significant risk level (NSRL)               | Maximum<br>allowable<br>dose level<br>(MADL) |
|------------------------|-----------------|------------------------|----------------------------|------------------------------|--|--|
| toluene(108-88-3)      |                 | X                      |                            |                              |  | 7000 µg/day                                  |
| Ethylbenzene(100-41-4) | Х               |                        |                            |                              | 54 µg/day<br>(inhalation); 41<br>µg/day (oral) |  |

| Component                    | State or local regulations  |
|------------------------------|---|
| ethyl methyl ketone(78-93-3) | U.S Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S New York City - Right to Know Hazardous Substances List; U.S Pennsylvania - RTK (Right to Know) List |
| heptan-2-one(110-43-0)       | U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S. – New York City – Right to Know Hazardous Substances List; U.S Pennsylvania - RTK (Right to Know) List   |
| methyl acetate(79-20-9)      | U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S New Jersey - Right to Know Hazardous Substance List; U.S New York City - Right to Know Hazardous Substances List; U.S Pennsylvania - RTK (Right to Know) List  |

07/01/2021 EN (English US) SDS ID: CLEARVAL-US-SDS 12/13

## Safety Data Sheet

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

| Component                 | State or local regulations   |
|---------------------------|--|
| n-butyl acetate(123-86-4) | U.S Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S. – New York City – Right to Know Hazardous Substances List; U.S Pennsylvania - RTK (Right to Know) List |
| cyclohexanone(108-94-1)   | U.S Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S. – New York City – Right to Know Hazardous Substances List; U.S Pennsylvania - RTK (Right to Know) List |

### **SECTION 16: Other information**

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

Revision date : 08/29/2019

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

temporary incapacitation or residual injury.

NFPA fire hazard : 4 - Materials that rapidly or completely vaporize at

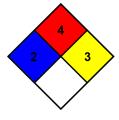
atmospheric pressure and normal ambient temperature or

that are readily dispersed in air and burn readily.

NFPA reactivity : 3 - Materials that in themselves are capable of detonation or explosive decomposition or explosive reaction but that

or explosive decomposition or explosive reaction but that require a strong initiating source or must be heated under

confinement before initiation.



#### Indication of changes:

| Section | Changed item                      | Change   | Comments |
|---------|-----------------------------------|----------|----------|
|         | MIR                               | Modified |          |
|         | Supersedes                        | Modified |          |
|         | Revision date                     | Modified |          |
|         | Precautionary statements (GHS US) | Modified |          |
| 9       | Appearance                        | Added    |          |
| 9       | Density                           | Added    |          |
| 9       | Flash point                       | Modified |          |

### SDS US GHS (GHS HazCom2012)

#### For professional use only.

The information contained within this Safety Data Sheet (SDS) is believed to be correct as of the date issued however it is subject to change from time to time. It does not purport to be all inclusive or exhaustive and shall only be used as a guide. U-POL makes no warranties, expressed or implied, including but not limited to, any implied warranty of fitness for a given purpose or usage. It is the Buyers responsibility to ensure the suitability of the products for their own use and to check the information is up to date. U-POL cannot be held responsible for the suitability of use for any of its products, considering the wide range of factors such as application, substrates and handling methods. Since these conditions of use are outside of our control, the company shall not be held liable for any damage resulting from handling or from contact with the product detailed. Moreover, addition of reducers, hardeners or other additives over and above U-POL's recommendations for use, may substantially alter the composition and hazards of the product. U-POL data sheets are available via the U-POL website at WWW.U-POL.COM.

07/01/2021 EN (English US) SDS ID: CLEARVAL-US-SDS 13/13