

According to OSHA Hazard Communication Standard 29CFR 1910.1200  
(HCS 2012)

|                       |                     |                                    |                   |
|-----------------------|---------------------|------------------------------------|-------------------|
| <b>1436337</b>        |                     | <b>CerMark ULTRA 12oz. Aerosol</b> |                   |
| Product specification | <b>RS_FP_606438</b> | Revision Date                      | <b>05/06/2020</b> |
| Version               | <b>1.0</b>          | Print Date                         | 06/04/2020        |
| Material number       | <b>1436337</b>      | Page                               | Page 1 of 18      |

## SECTION 1. IDENTIFICATION

Product name : **1436337**  
CerMark ULTRA 12oz. Aerosol

Material number : **1436337**

### Manufacturer or supplier's details

Company name of supplier : RINSYUNDOU Co.,Ltd

Address : SUNMAX Building4-47 Nakagawara, Gifu City, GIFU-Pref.  
Postal Code : 502-0013

Telephone : 058-294-7333

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Flammable aerosols : Category 2  
Eye irritation : Category 2A  
Germ cell mutagenicity : Category 1B  
Carcinogenicity : Category 2  
Specific target organ toxicity : Category 2  
- single exposure

### GHS Label element

Hazard pictograms :



Signal word

Hazard statements : H223 Flammable aerosol.  
H319 Causes serious eye irritation.  
H340 May cause genetic defects.  
H351 Suspected of causing cancer.  
H371 May cause damage to organs.

## SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

|                       |                     |                                    |                   |
|-----------------------|---------------------|------------------------------------|-------------------|
| <b>1436337</b>        |                     | <b>CerMark ULTRA 12oz. Aerosol</b> |                   |
| Product specification | <b>RS_FP_606438</b> | Revision Date                      | <b>05/06/2020</b> |
| Version               | <b>1.0</b>          | Print Date                         | 06/04/2020        |
| Material number       | <b>1436337</b>      | Page                               | Page 2 of 18      |

## Precautionary statements

: **Prevention:**

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P211 Do not spray on an open flame or other ignition source.
- P251 Pressurized container: Do not pierce or burn, even after use.
- P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

- 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 + P311 IF exposed or concerned: Call a POISON CENTER or doctor/ physician.
- P308 + P313 IF exposed or concerned: Get medical advice/ attention.
- P337 + P313 If eye irritation persists: Get medical advice/ attention.

**Storage:**

- P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

**Disposal:**

- P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

|                     |   |
|---------------------|---|
| Substance / Mixture | : Mixture   |
| Chemical nature     | : organic solvent, inorganic pigment, inorganic metal-nonmetal compound, silicon/siloxane, silicatic material, metal/metal compound, hydrocarbon, aliphatic |

## SAFETY DATA SHEET



https://www.laser-machine.com/  
webmaster@laser-machine.com

According to OSHA Hazard Communication Standard 29CFR 1910.1200  
(HCS 2012)

|                       |                     |                                    |                   |
|-----------------------|---------------------|------------------------------------|-------------------|
| <b>1436337</b>        |                     | <b>CerMark ULTRA 12oz. Aerosol</b> |                   |
| Product specification | <b>RS_FP_606438</b> | Revision Date                      | <b>05/06/2020</b> |
| Version               | <b>1.0</b>          | Print Date                         | 06/04/2020        |
| Material number       | <b>1436337</b>      | Page                               | Page 3 of 18      |

**Hazardous components**

| Chemical Name        | CAS-No.    | Concentration (%) |
|----------------------|------------|-------------------|
| ethanol              | 64-17-5    | >= 30 - < 50      |
| butane               | 106-97-8   | >= 10 - < 20      |
| Isobutane            | 75-28-5    | >= 5 - < 10       |
| Molybdenum(VI) oxide | 1313-27-5  | >= 5 - < 10       |
| propane              | 74-98-6    | >= 5 - < 10       |
| mica                 | 12001-26-2 | >= 5 - < 10       |
| silicon              | 7440-21-3  | >= 1 - < 5        |
| manganese            | 7439-96-5  | >= 1 - < 5        |
| 2-butoxyethanol      | 111-76-2   | >= 1 - < 5        |
| ethyl acetate        | 141-78-6   | >= 1 - < 5        |
| 4-methylpentan-2-one | 108-10-1   | >= 0.1 - < 1      |

**SECTION 4. FIRST AID MEASURES**

General advice : Consult a physician.

Most important symptoms and effects, both acute and delayed : Causes serious eye irritation.  
May cause genetic defects.  
Suspected of causing cancer.  
May cause damage to organs.

**SECTION 5. FIREFIGHTING MEASURES**

Specific hazards during firefighting : Do not use a solid water stream as it may scatter and spread fire.  
Cool closed containers exposed to fire with water spray.

Hazardous combustion products : No hazardous combustion products are known

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Ensure adequate ventilation.  
Evacuate personnel to safe areas.

Environmental precautions : Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for : Keep in suitable, closed containers for disposal.

## SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

|                       |                     |                                    |                   |
|-----------------------|---------------------|------------------------------------|-------------------|
| <b>1436337</b>        |                     | <b>CerMark ULTRA 12oz. Aerosol</b> |                   |
| Product specification | <b>RS_FP_606438</b> | Revision Date                      | <b>05/06/2020</b> |
| Version               | <b>1.0</b>          | Print Date                         | 06/04/2020        |
| Material number       | <b>1436337</b>      | Page                               | Page 4 of 18      |

containment and cleaning up      Clean contaminated floors and objects thoroughly while observing environmental regulations.

### SECTION 7. HANDLING AND STORAGE

Advice on safe handling      : For personal protection see section 8.  
 Smoking, eating and drinking should be prohibited in the application area.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

| Components           | CAS-No.    | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis     |
|----------------------|------------|-------------------------------|--|-----------|
| ethanol              | 64-17-5    | TWA                           | 1,000 ppm                                      | ACGIH     |
|                      |            | TWA                           | 1,000 ppm<br>1,900 mg/m <sup>3</sup>           | NIOSH REL |
|                      |            | TWA                           | 1,000 ppm<br>1,900 mg/m <sup>3</sup>           | OSHA Z-1  |
|                      |            | TWA                           | 1,000 ppm<br>1,900 mg/m <sup>3</sup>           | OSHA P0   |
|                      |            | STEL                          | 1,000 ppm                                      | ACGIH     |
| butane               | 106-97-8   | TWA                           | 800 ppm<br>1,900 mg/m <sup>3</sup>             | NIOSH REL |
|                      |            | TWA                           | 800 ppm<br>1,900 mg/m <sup>3</sup>             | OSHA P0   |
|                      |            | TWA                           | 1,000 ppm                                      | ACGIH     |
|                      |            | STEL                          | 1,000 ppm                                      | ACGIH     |
| Isobutane            | 75-28-5    | TWA                           | 800 ppm<br>1,900 mg/m <sup>3</sup>             | NIOSH REL |
|                      |            | STEL                          | 1,000 ppm                                      | ACGIH     |
|                      |            | TWA                           | 5 mg/m <sup>3</sup><br>(Molybdenum)            | OSHA Z-1  |
| Molybdenum(VI) oxide | 1313-27-5  | TWA<br>(Respirable fraction)  | 0.5 mg/m <sup>3</sup><br>(Molybdenum)          | ACGIH     |
|                      |            | TWA                           | 5 mg/m <sup>3</sup><br>(Molybdenum)            | OSHA P0   |
|                      |            | TWA                           | 1,000 ppm<br>1,800 mg/m <sup>3</sup>           | NIOSH REL |
| propane              | 74-98-6    | TWA                           | 1,000 ppm<br>1,800 mg/m <sup>3</sup>           | OSHA Z-1  |
|                      |            | TWA                           | 1,000 ppm<br>1,800 mg/m <sup>3</sup>           | OSHA P0   |
|                      |            | TWA                           | 3 mg/m <sup>3</sup>                            | ACGIH     |
| mica                 | 12001-26-2 | TWA                           | 3 mg/m <sup>3</sup>                            | ACGIH     |

# SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200  
(HCS 2012)

|                       |                     |                                    |                   |  |
|-----------------------|---------------------|------------------------------------|-------------------|--|
| <b>1436337</b>        |                     | <b>CerMark ULTRA 12oz. Aerosol</b> |                   |  |
| Product specification | <b>RS_FP_606438</b> | Revision Date                      | <b>05/06/2020</b> |  |
| Version               | <b>1.0</b>          | Print Date                         | 06/04/2020        |  |
| Material number       | <b>1436337</b>      | Page                               | Page 5 of 18      |  |

|                 |           |                                |                                     |           |
|-----------------|-----------|--------------------------------|-------------------------------------|-----------|
|                 |           | (Respirable fraction)          |                                     |           |
|                 |           | TWA (Dust)                     | 20 Million particles per cubic foot | OSHA Z-3  |
|                 |           | TWA (Respirable)               | 3 mg/m3                             | NIOSH REL |
|                 |           | TWA (respirable dust fraction) | 3 mg/m3                             | OSHA P0   |
| silicon         | 7440-21-3 | TWA (Respirable)               | 5 mg/m3                             | NIOSH REL |
|                 |           | TWA (total)                    | 10 mg/m3                            | NIOSH REL |
|                 |           | TWA (total dust)               | 15 mg/m3                            | OSHA Z-1  |
|                 |           | TWA (respirable fraction)      | 5 mg/m3                             | OSHA Z-1  |
|                 |           | TWA (Total dust)               | 10 mg/m3                            | OSHA P0   |
|                 |           | TWA (respirable dust fraction) | 5 mg/m3                             | OSHA P0   |
| manganese       | 7439-96-5 | C (Fumes)                      | 5 mg/m3                             | OSHA Z-1  |
|                 |           | TWA (Fumes)                    | 1 mg/m3 (Manganese)                 | NIOSH REL |
|                 |           | ST (Fumes)                     | 3 mg/m3 (Manganese)                 | NIOSH REL |
|                 |           | TWA (Fumes)                    | 1 mg/m3 (Manganese)                 | OSHA P0   |
|                 |           | STEL (Fumes)                   | 3 mg/m3 (Manganese)                 | OSHA P0   |
|                 |           | TWA (Inhalable fraction)       | 0.1 mg/m3 (Manganese)               | ACGIH     |
|                 |           | TWA (Respirable fraction)      | 0.02 mg/m3 (Manganese)              | ACGIH     |
| 2-butoxyethanol | 111-76-2  | TWA                            | 20 ppm                              | ACGIH     |
|                 |           | TWA                            | 5 ppm<br>24 mg/m3                   | NIOSH REL |
|                 |           | TWA                            | 50 ppm<br>240 mg/m3                 | OSHA Z-1  |
|                 |           | TWA                            | 25 ppm<br>120 mg/m3                 | OSHA P0   |
| ethyl acetate   | 141-78-6  | TWA                            | 400 ppm                             | ACGIH     |
|                 |           | TWA                            | 400 ppm<br>1,400 mg/m3              | NIOSH REL |
|                 |           | TWA                            | 400 ppm<br>1,400 mg/m3              | OSHA Z-1  |

# SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

|                       |                     |                                    |                     |
|-----------------------|---------------------|------------------------------------|---------------------|
| <b>1436337</b>        |                     | <b>CerMark ULTRA 12oz. Aerosol</b> |                     |
| Product specification | <b>RS_FP_606438</b> | Revision Date                      | <b>05/06/2020</b>   |
| Version               | <b>1.0</b>          | Print Date                         | <b>06/04/2020</b>   |
| Material number       | <b>1436337</b>      | Page                               | <b>Page 6 of 18</b> |

|                      |          |      |                                    |           |
|----------------------|----------|------|------------------------------------|-----------|
|                      |          | TWA  | 400 ppm<br>1,400 mg/m <sup>3</sup> | OSHA P0   |
| 4-methylpentan-2-one | 108-10-1 | TWA  | 20 ppm                             | ACGIH     |
|                      |          | STEL | 75 ppm                             | ACGIH     |
|                      |          | TWA  | 50 ppm<br>205 mg/m <sup>3</sup>    | NIOSH REL |
|                      |          | ST   | 75 ppm<br>300 mg/m <sup>3</sup>    | NIOSH REL |
|                      |          | TWA  | 100 ppm<br>410 mg/m <sup>3</sup>   | OSHA Z-1  |
|                      |          | TWA  | 50 ppm<br>205 mg/m <sup>3</sup>    | OSHA P0   |
|                      |          | STEL | 75 ppm<br>300 mg/m <sup>3</sup>    | OSHA P0   |

### Biological occupational exposure limits

| Components           | CAS-No.  | Control parameters      | Biological specimen | Sampling time   | Permissible concentration | Basis        |
|----------------------|----------|-------------------------|---------------------|---|---------------------------|--------------|
| 2-butoxyethanol      | 111-76-2 | Butoxyacetic acid (BAA) | Urine               | End of shift<br>(As soon as possible after exposure ceases) | 200 mg/g<br>Creatinine    | ACGIH<br>BEI |
| 4-methylpentan-2-one | 108-10-1 | methyl isobutyl ketone  | Urine               | End of shift<br>(As soon as possible after exposure ceases) | 1 mg/l                    | ACGIH<br>BEI |

**Engineering measures** : No data available

### Personal protective equipment

**Eye protection** : Safety glasses  
 Ensure that eyewash stations and safety showers are close to the workstation location.

**Protective measures** : Wear suitable protective equipment.  
 When using do not eat, drink or smoke.

**Hygiene measures** : Wash hands before breaks and immediately after handling the product.  
 Remove contaminated clothing and protective equipment before entering eating areas.

---

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

# SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

| 1436337               |              | CerMark ULTRA 12oz. Aerosol |              |
|-----------------------|--------------|-----------------------------|--------------|
| Product specification | RS_FP_606438 | Revision Date               | 05/06/2020   |
| Version               | 1.0          | Print Date                  | 06/04/2020   |
| Material number       | 1436337      | Page                        | Page 7 of 18 |

---

|  |   |
|--|---|
| Appearance                               | : aerosol   |
| Colour                                   | : dark grey   |
| Odour                                    | : alcohol-like  |
| Flash point                              | : -104.44 °C<br>Method: calculated  |
| Upper explosion limit                    | : 19 %(V)   |
| Lower explosion limit                    | : 1.1 %(V)  |
| Relative vapour density                  | : No data available   |
| Density                                  | : 0.831 g/cm3   |
| Solubility(ies)                          |   |
| Water solubility                         | : soluble   |
| Oxidizing properties                     | : No data available   |
| Heat of combustion                       | : 9,713.72 Btu/lb   |
| Volatile organic compounds (VOC) content | : 4.67 lb/gal<br>The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489):<br>This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450. |

---

## SECTION 10. STABILITY AND REACTIVITY

|                    |   |
|--------------------|---|
| Reactivity         | : Stable under recommended storage conditions.        |
| Chemical stability | : No decomposition if stored and applied as directed. |

---

## SECTION 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

Not classified based on available information.

#### **Product:**

|                           |  |
|---------------------------|--|
| Acute oral toxicity       | : Acute toxicity estimate: > 5,000 mg/kg<br>Method: Calculation method                   |
| Acute inhalation toxicity | : Acute toxicity estimate: > 10 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist |

## SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

| 1436337               |              | CerMark ULTRA 12oz. Aerosol |              |
|-----------------------|--------------|-----------------------------|--------------|
| Product specification | RS_FP_606438 | Revision Date               | 05/06/2020   |
| Version               | 1.0          | Print Date                  | 06/04/2020   |
| Material number       | 1436337      | Page                        | Page 8 of 18 |

Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method

**Components:**

***ethanol:***

Acute oral toxicity : LD50 Oral (Rat): 10,470 mg/kg

: LD50 (Rabbit): 15,800 mg/kg

Acute dermal toxicity

***butane:***

Acute inhalation toxicity : LC50 (Rat): 658,000 mg/m3

Exposure time: 4 h

Test atmosphere: gas

Test substance: No data available

***Molybdenum(VI) oxide:***

Acute oral toxicity : LD50 (Rat, male and female): 4,461 mg/kg

Method: OECD Test Guideline 401 GLP:

yes

Acute inhalation toxicity : LC50 (Rat, male and female): > 5,840 mg/m3

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Target Organs: Mucous membranes

GLP: yes

Assessment: The substance or mixture has no acute inhalation toxicity

Remarks: No adverse effect has been observed in acute toxicity tests.

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

Assessment: The substance or mixture has no acute dermal toxicity

***propane:***

Acute inhalation toxicity : LC50 (Rat): 658 mg/l Exposure

time: 4 h

Test atmosphere: gas

***silicon:***

Acute oral toxicity : LD50 Oral (Rat): 3,160 mg/kg

***manganese:***

Acute oral toxicity : LD50 Oral (Rat): 9 g/kg

***2-butoxyethanol:***



# SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

| 1436337               |              | CerMark ULTRA 12oz. Aerosol |              |
|-----------------------|--------------|-----------------------------|--------------|
| Product specification | RS_FP_606438 | Revision Date               | 05/06/2020   |
| Version               | 1.0          | Print Date                  | 06/04/2020   |
| Material number       | 1436337      | Page                        | Page 9 of 18 |

- Acute oral toxicity : LD50 Oral (Rat, male and female): 1,200 mg/kg  
Method: OECD Test Guideline 401  
GLP: no
- Acute dermal toxicity : LD50 Dermal (Rabbit, male and female): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes
- ethyl acetate:**
- Acute oral toxicity : LD50 Oral (Rat): 6,100 mg/kg
- Acute inhalation toxicity : LC50 (Rat): > 22.5 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour
- Acute dermal toxicity : LD50 Dermal (Rabbit): > 18,000 mg/kg
- 4-methylpentan-2-one:**
- Acute oral toxicity : LD50 Oral (Rat): 2,080 mg/kg
- Acute dermal toxicity : LD50 Dermal (Rabbit): 3,000 mg/kg

## Skin corrosion/irritation

Not classified based on available information.

### Components:

#### **ethanol:**

Species: Rabbit  
Exposure time: 24 h  
Method: OECD Test Guideline 404 Result:  
No skin irritation

#### **Molybdenum(VI) oxide:**

Species: Rabbit  
Exposure time: 4 h  
Assessment: No skin irritation  
Method: OECD Test Guideline 404  
Result: No skin irritation  
GLP: yes

#### **2-butoxyethanol:**

Species: Rabbit  
Exposure time: 72 h  
Method: OECD Test Guideline 404  
Result: Irritating to skin.  
GLP: yes

**Serious eye damage/eye irritation** Causes serious eye irritation.

### Components:

# SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

|                       |                     |                                    |                   |
|-----------------------|---------------------|------------------------------------|-------------------|
| <b>1436337</b>        |                     | <b>CerMark ULTRA 12oz. Aerosol</b> |                   |
| Product specification | <b>RS_FP_606438</b> | Revision Date                      | <b>05/06/2020</b> |
| Version               | <b>1.0</b>          | Print Date                         | 06/04/2020        |
| Material number       | <b>1436337</b>      | Page                               | Page 10 of 18     |

**ethanol:**

Species: Rabbit  
Result: Eye irritation  
Method: OECD Test Guideline 405

**Molybdenum(VI) oxide:**

Species: Rabbit  
Result: Irritating to eyes. Assessment:  
Irritating to eyes.

**silicon:**

Species: Rabbit  
Result: Mild eye irritation  
Method: Draize Test

**2-butoxyethanol:**

Result: Eye irritation

**ethyl acetate:** Species:

Rabbit  
Result: No eye irritation

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.  
Respiratory sensitisation: Not classified based on available information.

**Germ cell mutagenicity** May cause genetic defects.

**Carcinogenicity**

Suspected of causing cancer.

**IARC**

Group 2B: Possibly carcinogenic to humans

4-methylpentan-2-one

108-10-1

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Reproductive toxicity**

Not classified based on available information.

**STOT Specific Target Organ Toxicity - single exposure** May cause damage to organs.

**Components:**

**Molybdenum(VI) oxide:**

## SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

|                       |                     |                                    |                   |
|-----------------------|---------------------|------------------------------------|-------------------|
| <b>1436337</b>        |                     | <b>CerMark ULTRA 12oz. Aerosol</b> |                   |
| Product specification | <b>RS_FP_606438</b> | Revision Date                      | <b>05/06/2020</b> |
| Version               | <b>1.0</b>          | Print Date                         | 06/04/2020        |
| Material number       | <b>1436337</b>      | Page                               | Page 11 of 18     |

Assessment: May cause respiratory irritation.

**STOT Specific Target Organ Toxicity - repeated exposure** Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

### SECTION 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

**Components:**

***ethanol:***

Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia (water flea)): 9,268 mg/l  
 Exposure time: 48 h

***Molybdenum(VI) oxide:***

Toxicity to fish : (Oncorhynchus mykiss (rainbow trout)): 100 mg/l  
 Method: OECD Test Guideline 203  
 Remarks: No toxicity at the limit of solubility

(Pimephales promelas (fathead minnow)): 370 mg/l  
 Exposure time: 96 h  
 Remarks: No toxicity at the limit of solubility

Toxicity to daphnia and other aquatic invertebrates : (Daphnia magna (Water flea)): 100 mg/l  
 Exposure time: 24 h  
 Method: OECD Test Guideline 202  
 Remarks: No toxicity at the limit of solubility

(Daphnia magna (Water flea)): 100 mg/l  
 Exposure time: 48 h  
 Method: OECD Test Guideline 202  
 Remarks: No toxicity at the limit of solubility

***2-butoxyethanol:***

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 1,490 mg/l  
 Exposure time: 96 h  
 Test Type: static test  
 Method: OECD Test Guideline 203  
 GLP: no

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1,800 mg/l  
 Exposure time: 48 h

***ethyl acetate:***

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 220 mg/l  
 Exposure time: 96 h  
 Test Type: flow-through test

# SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

|                       |                     |                                    |                   |
|-----------------------|---------------------|------------------------------------|-------------------|
| <b>1436337</b>        |                     | <b>CerMark ULTRA 12oz. Aerosol</b> |                   |
| Product specification | <b>RS_FP_606438</b> | Revision Date                      | <b>05/06/2020</b> |
| Version               | <b>1.0</b>          | Print Date                         | 06/04/2020        |
| Material number       | <b>1436337</b>      | Page                               | Page 12 of 18     |

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 560 mg/l  
Exposure time: 48 h

Toxicity to algae : EC50 (algae): 3,300 mg/l  
Exposure time: 48 h

#### **4-methylpentan-2-one:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 496 - 514 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 170 mg/l  
Exposure time: 48 h

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (algae)): 400 mg/l  
Exposure time: 96 h

### **Persistence and degradability**

#### **Components:**

##### ***ethanol:***

Biodegradability : Remarks: No data available

##### ***butane:***

Biodegradability : Remarks: No data available

##### ***Molybdenum(VI) oxide:***

Biodegradability : Remarks: No data available

##### ***propane:***

Biodegradability : Remarks: No data available

##### ***mica:***

Biodegradability : Remarks: No data available

##### ***silicon:***

Biodegradability : Remarks: No data available

##### ***manganese:***

Biodegradability : Remarks: No data available

##### ***2-butoxyethanol:***

Biodegradability : Remarks: No data available

##### ***ethyl acetate:***

Biodegradability : Remarks: No data available

### **Bioaccumulative potential**

#### **Components:**

##### ***ethanol:***

# SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

|                       |                     |                                    |                   |
|-----------------------|---------------------|------------------------------------|-------------------|
| <b>1436337</b>        |                     | <b>CerMark ULTRA 12oz. Aerosol</b> |                   |
| Product specification | <b>RS_FP_606438</b> | Revision Date                      | <b>05/06/2020</b> |
| Version               | <b>1.0</b>          | Print Date                         | 06/04/2020        |
| Material number       | <b>1436337</b>      | Page                               | Page 13 of 18     |

Bioaccumulation : Remarks: No data available

Partition coefficient: n-octanol/water : log Pow: -0.349 (24 °C)

***butane:***

Bioaccumulation : Remarks: No data available

Partition coefficient: n-octanol/water : log Pow: 2.89

***Molybdenum(VI) oxide:***

Bioaccumulation : Remarks: No data available

***propane:***

Bioaccumulation : Remarks: No data available

Partition coefficient: noctanol/water : Remarks: No data available

***mica:***

Bioaccumulation : Remarks: No data available

***silicon:***

Bioaccumulation : Remarks: No data available

***manganese:***

Bioaccumulation : Remarks: No data available

***2-butoxyethanol:***

Bioaccumulation : Remarks: No data available

Partition coefficient: n-octanol/water : log Pow: 0.77 (20 °C)  
pH: 7

***ethyl acetate:***

Bioaccumulation : Remarks: No data available

Partition coefficient: n-octanol/water : log Pow: 0.73 (20 °C)

***4-methylpentan-2-one:***

Partition coefficient: n-octanol/water : Pow: 1.19

**Mobility in soil**

**Components:**

***ethanol:***

Distribution among environmental compartments : Remarks: No data available

# SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

|                       |                     |                                    |                   |
|-----------------------|---------------------|------------------------------------|-------------------|
| <b>1436337</b>        |                     | <b>CerMark ULTRA 12oz. Aerosol</b> |                   |
| Product specification | <b>RS_FP_606438</b> | Revision Date                      | <b>05/06/2020</b> |
| Version               | <b>1.0</b>          | Print Date                         | 06/04/2020        |
| Material number       | <b>1436337</b>      | Page                               | Page 14 of 18     |

**butane:**

Distribution among environmental compartments : Remarks: No data available

**Molybdenum(VI) oxide:**

Distribution among environmental compartments : Remarks: No data available

**propane:**

Distribution among environmental compartments : Remarks: No data available

**mica:**

Distribution among environmental compartments : Remarks: No data available

**silicon:**

Distribution among environmental compartments : Remarks: No data available

**manganese:**

Distribution among environmental compartments : Remarks: No data available

**2-butoxyethanol:**

Distribution among environmental compartments : Remarks: No data available

**ethyl acetate:**

Distribution among environmental compartments : Remarks: No data available

**Other adverse effects**

**Product:**

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances  
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

---

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

Waste from residues : Dispose of wastes in an approved waste disposal facility.

# SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

|                       |                     |                                    |                   |
|-----------------------|---------------------|------------------------------------|-------------------|
| <b>1436337</b>        |                     | <b>CerMark ULTRA 12oz. Aerosol</b> |                   |
| Product specification | <b>RS_FP_606438</b> | Revision Date                      | <b>05/06/2020</b> |
| Version               | <b>1.0</b>          | Print Date                         | 06/04/2020        |
| Material number       | <b>1436337</b>      | Page                               | Page 15 of 18     |

## SECTION 14. TRANSPORT INFORMATION

### IATA-DGR

UN number : UN 1950  
Proper shipping name : Aerosols, non-flammable  
Class : 2.2  
Packing group : Not assigned by regulation  
Labels : 2.2  
Packing instruction (cargo aircraft) : 203  
Packing instruction (passenger aircraft) : 203  
Packing instruction (LQ) : Y203

### IMDG-Code

UN number : UN 1950  
Proper shipping name : AEROSOLS  
  
Class : 2.2  
Packing group : Not assigned by regulation  
Labels : 2.2  
EmS Code : F-D, S-U  
Marine pollutant : no

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### National Regulations

#### 49 CFR

UN number : UN 1950  
Proper shipping name : AEROSOLS  
  
Class : 2.2  
Packing group : Not assigned by regulation  
Labels : 2.2  
ERG Code : 126  
Marine pollutant : no

## SECTION 15. REGULATORY INFORMATION

**TSCA list** : TSCA\_12b - Not relevant

**TSCA list** : TSCA 5a - Not relevant

**EPCRA - Emergency Planning and Community Right-to-Know Act**  
**CERCLA Reportable Quantity**

# SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

|                       |                     |                                    |                   |
|-----------------------|---------------------|------------------------------------|-------------------|
| <b>1436337</b>        |                     | <b>CerMark ULTRA 12oz. Aerosol</b> |                   |
| Product specification | <b>RS_FP_606438</b> | Revision Date                      | <b>05/06/2020</b> |
| Version               | <b>1.0</b>          | Print Date                         | 06/04/2020        |
| Material number       | <b>1436337</b>      | Page                               | Page 16 of 18     |

| Components    | CAS-No.  | Component RQ (lbs) | Calculated product RQ (lbs) |
|---------------|----------|--------------------|-----------------------------|
| ethyl acetate | 141-78-6 | 5000               | *                           |

\*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 304 Extremely Hazardous Substances Reportable Quantity** This material does not contain any components with a section 304 EHS RQ.

- SARA 311/312 Hazards** : Chronic Health Hazard  
 Acute Health Hazard
- SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
- SARA 313** : This product contains components that are reportable under the regulation.
- Chromium III Compounds  
 Cobalt, inorganic compounds  
 Molybdenum trioxide  
 Manganese  
 Certain Glycol Ethers

**Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).  
 This product contains components that are reportable under the regulation.  
 This product contains components that are reportable under the regulation.  
 This product contains components that are reportable under the regulation.

**Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.  
 This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.  
 This product contains components that are reportable under the regulation.

**Massachusetts Right To Know**

This product contains components that are reportable under the regulation.

**Pennsylvania Right To Know**

This product contains components that are reportable under the regulation.

**New Jersey Right To Know**

This product contains components that are reportable under the regulation.



# SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

|                       |                     |                                    |                   |
|-----------------------|---------------------|------------------------------------|-------------------|
| <b>1436337</b>        |                     | <b>CerMark ULTRA 12oz. Aerosol</b> |                   |
| Product specification | <b>RS_FP_606438</b> | Revision Date                      | <b>05/06/2020</b> |
| Version               | <b>1.0</b>          | Print Date                         | 06/04/2020        |
| Material number       | <b>1436337</b>      | Page                               | Page 17 of 18     |

## California Prop 65

WARNING! This product contains a chemical known to the State of California to cause cancer.  
WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

## The components of this product are reported in the following inventories:

- EINECS (European Union) : On the inventory, or in compliance with the inventory
- SWISS (Switzerland) : On the inventory, or in compliance with the inventory
- TSCA (United States) : On TSCA Inventory
- DSL/NDSL (Canada) : This product contains one or several components listed in the Canadian NDSL.
- AICS (Australia) : Not in compliance with the inventory
- NZioC (New Zealand) : Not in compliance with the inventory
- ENCS (Japan) : On the inventory, or in compliance with the inventory
- ISHL (Japan) : Not in compliance with the inventory
- KECI (Korea) : Not in compliance with the inventory
- PICCS (Philippines) : Not in compliance with the inventory
- IECSC (China) : On the inventory, or in compliance with the inventory
- TCSI (Taiwan) : Not in compliance with the inventory
- CICR (Turkey) : Not in compliance with the inventory
- INSQ (Mexico) : Not in compliance with the inventory

## SECTION 16. OTHER INFORMATION

Revision Date : 05/06/2020

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

# SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200  
(HCS 2012)

| <b>1436337</b>        |                     | <b>CerMark ULTRA 12oz. Aerosol</b> |                      |
|-----------------------|---------------------|------------------------------------|----------------------|
| Product specification | <b>RS_FP_606438</b> | Revision Date                      | <b>05/06/2020</b>    |
| Version               | <b>1.0</b>          | Print Date                         | <b>06/04/2020</b>    |
| Material number       | <b>1436337</b>      | Page                               | <b>Page 18 of 18</b> |

---

US / EN