# **SAFETY DATA SHEET**



1/14

| Date of printing                                  | : 2016-08-05.     | Date of issue       | : 2016-08-05.            |
|---|-------------------|---------------------|--------------------------|
| Section 1. Identi                                 | fication          |                     |                          |
|   |                   | Prepared by         |                          |
|   |                   | Akzo Nobel Coating  | gs Inc.                  |
| Prepared for                                      |                   | 1431 Progress Ave.  |                          |
| ATTN:   |                   | High Point, NC 2720 | 61 US                    |
| Chemcraft   |                   |                     |                          |
| 1431 Progress Ave.                                |                   | (336) 841-5111      |                          |
|   |                   | In case of emergen  | cy (Health or Spills):   |
| High Point, NC 27260 US                           |                   | CHEMTREC (US an     | d Canada) (800) 424-9300 |
| Produc  | t no. : 436-4830  |                     |                          |
| Container Code(s) : 436-4830-V1CG, 436-4830-V5PVS |                   |                     |                          |
| Product - Class : ora Verde® Chiaro PU T/C Satin  |                   |                     |                          |
| Customer Part Nur                                 | nber :            |                     |                          |
| Customer Ship                                     | o ID : 0000109024 |                     |                          |

### Section 2. Hazards identification

| OSHA/HCS status                            | : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  |
|--|--|
| Classification of the substance or mixture | <ul> <li>FLAMMABLE LIQUIDS - Category 2<br/>SKIN CORROSION/IRRITATION - Category 2<br/>CARCINOGENICITY - Category 2<br/>TOXIC TO REPRODUCTION (Fertility) - Category 2<br/>TOXIC TO REPRODUCTION (Unborn child) - Category 2<br/>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -<br/>Category 3<br/>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2<br/>AQUATIC HAZARD (LONG-TERM) - Category 3</li> </ul> |
| GHS label elements                         |  |
| Hazard pictograms                          |  |
| Signal word                                | : Danger   |
| Hazard statements                          | <ul> <li>Highly flammable liquid and vapor.<br/>Causes skin irritation.</li> <li>Suspected of damaging fertility or the unborn child.</li> <li>Suspected of causing cancer.</li> <li>May cause drowsiness and dizziness.</li> <li>May cause damage to organs through prolonged or repeated exposure.</li> <li>Harmful to aquatic life with long lasting effects.</li> </ul>  |

### Section 2. Hazards identification

#### **Precautionary statements** General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Obtain special instructions before use. Do not handle until all safety precautions have Prevention been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Wash hands thoroughly after handling. : Get medical attention if you feel unwell. IF exposed or concerned: Get medical Response attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation occurs: Get medical attention. Storage : Store locked up. Store in a well-ventilated place. Keep cool. Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations. Hazards not otherwise : None known. classified

NOTICE: Reports have associated repeated and prolonged OVEREXPOSURE to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents of this package may be harmful or fatal.

### Section 3. Composition/information on ingredients

| Substance/mixture | : Mixture        |
|-------------------|------------------|
| Other means of    | : Not available. |
| identification    |                  |

#### **CAS number/other identifiers**

| CAS number   | : Not applicable. |
|--------------|-------------------|
| Product code | : 436-4830        |

| Ingredient name                 | % | CAS number |
|---------------------------------|---|------------|
| butyl acetate                   |   | 123-86-4   |
| xylene, mixed isomers           |   | 1330-20-7  |
| methyl n-amyl ketone            |   | 110-43-0   |
| butanone                        |   | 78-93-3    |
| toluene                         |   | 108-88-3   |
| di-n-propyl ketone              |   | 123-19-3   |
| ethyl benzene                   |   | 100-41-4   |
| ethyl 3-ethoxypropionate        |   | 763-69-9   |
| nitrocellulose                  |   | 9004-70-0  |
| 2-methoxy-1-methylethyl acetate |   | 108-65-6   |
| 2,6-dimethylheptan-4-one        |   | 108-83-8   |
| 4-methylpentan-2-one            |   | 108-10-1   |
| 1-propanol, 2-methyl-           |   | 78-83-1    |

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

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

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

# Section 4. First aid measures

| Description of pages | conv first sid messures   |
|----------------------|---|
|                      | sary first aid measures   |
| Eye contact          | : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.   |
| Inhalation           | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| Skin contact         | : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.  |
| Ingestion            | : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.  |

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

| Potential acute healt | h effects   |
|-----------------------|---|
| Eye contact           | : Causes serious eye irritation.  |
| Inhalation            | <ul> <li>Can cause central nervous system (CNS) depression. May cause drowsiness and<br/>dizziness. Exposure to decomposition products may cause a health hazard. Serious<br/>effects may be delayed following exposure.</li> </ul> |
| Skin contact          | : Causes skin irritation.   |
| Ingestion             | : Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.   |
| Over-exposure signs   | /symptoms   |
| Eye contact           | : Adverse symptoms may include the following:<br>pain or irritation<br>watering<br>redness  |
| Inhalation            | : Adverse symptoms may include the following:<br>nausea or vomiting<br>headache<br>drowsiness/fatigue<br>dizziness/vertigo<br>unconsciousness<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations         |
| Skin contact          | : Adverse symptoms may include the following:<br>irritation<br>redness<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations  |

### Section 4. First aid measures

| Ingestion                   | : Adverse symptoms may include the following:  |
|-----------------------------|--|
| -                           | reduced fetal weight   |
|                             | increase in fetal deaths   |
|                             | skeletal malformations   |
| Indication of immediate med | dical attention and special treatment needed, if necessary   |
| Notes to physician          | : In case of inhalation of decomposition products in a fire, symptoms may be delayed.<br>The exposed person may need to be kept under medical surveillance for 48 hours.   |
| Specific treatments         | : No specific treatment.   |
| Protection of first-aiders  | : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. |

See toxicological information (Section 11)

### Section 5. Fire-fighting measures

| Extinguishing media                            |  |
|--|--|
| Suitable extinguishing media                   | : Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.   |
| Unsuitable extinguishing media                 | : Do not use water jet.  |
| Specific hazards arising from the chemical     | : Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. |
| Hazardous thermal decomposition products       | : Decomposition products may include the following materials:<br>carbon dioxide<br>carbon monoxide<br>nitrogen oxides  |
| Special protective actions for fire-fighters   | : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.   |
| Special protective equipment for fire-fighters | : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.  |

### Section 6. Accidental release measures

| Personal precautions, protect  | tiv | e equipment and emergency procedures  |
|--------------------------------|-----|---|
| For non-emergency<br>personnel | :   | No action shall be taken involving any personal risk or without suitable training.<br>Evacuate surrounding areas. Keep unnecessary and unprotected personnel from<br>entering. Do not touch or walk through spilled material. Shut off all ignition sources.<br>No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide<br>adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put<br>on appropriate personal protective equipment. |
| For emergency responders       | :   | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".   |
| Environmental precautions      | :   | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains<br>and sewers. Inform the relevant authorities if the product has caused environmental<br>pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to<br>the environment if released in large quantities.   |

Date of issue/Date of revision

### Section 6. Accidental release measures

#### Methods and materials for containment and cleaning up

| Small spill | : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.   |
|-------------|--|
| Large spill | : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. |

### Section 7. Handling and storage

### Precautions for safe handling

| Protective measures  | Put on appropriate personal protective equipment (see Section 8). Avoid exposu<br>obtain special instructions before use. Avoid exposure during pregnancy. Do not<br>nandle until all safety precautions have been read and understood. Do not get in<br>or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid releas<br>the environment. Use only with adequate ventilation. Wear appropriate respirate<br>ventilation is inadequate. Do not enter storage areas and confined spaces unles<br>adequately ventilated. Keep in the original container or an approved alternative r<br>from a compatible material, kept tightly closed when not in use. Store and use a<br>from heat, sparks, open flame or any other ignition source. Use explosion-proof<br>electrical (ventilating, lighting and material handling) equipment. Use only non-sp<br>cools. Take precautionary measures against electrostatic discharges. Empty co<br>retain product residue and can be hazardous. Do not reuse container. | ot<br>n eyes<br>se to<br>or when<br>is<br>made<br>way<br>parking |
|--|---|--|
| Advice on general<br>occupational hygiene                          | Eating, drinking and smoking should be prohibited in areas where this material is<br>nandled, stored and processed. Workers should wash hands and face before ea<br>drinking and smoking. Remove contaminated clothing and protective equipment<br>entering eating areas. See also Section 8 for additional information on hygiene<br>measures.   | ating,   |
| Conditions for safe storage,<br>including any<br>incompatibilities | Store in accordance with local regulations. Store in a segregated and approved<br>Store in original container protected from direct sunlight in a dry, cool and well-ve<br>area, away from incompatible materials (see Section 10) and food and drink. Sto<br>ocked up. Eliminate all ignition sources. Separate from oxidizing materials. Ke<br>container tightly closed and sealed until ready for use. Containers that have bee<br>opened must be carefully resealed and kept upright to prevent leakage. Do not sunlabeled containers. Use appropriate containment to avoid environmental<br>contamination.   | entilated<br>ore<br>ep<br>n                                      |

### Section 8. Exposure controls/personal protection

#### **Control parameters**

#### **Occupational exposure limits**

| Ingredient name                |               | Exposure limits                         |   |                       |      |  |
|--------------------------------|---------------|---|---|-----------------------|------|--|
| butyl acetate                  |               |   | OSHA PEL 1989 (United States, 3/1989).                          |                       |      |  |
|                                |               | TWA: 150 ppm 8 hours.                   |   |                       |      |  |
|                                |               |   | TWA: 710 mg/m <sup>3</sup> 8 hours.                             |                       |      |  |
| STEL: 200 ppm 15 m             |               |   |   |                       |      |  |
|                                |               | STEL: 950 mg/m <sup>3</sup> 15 minutes. |   |                       |      |  |
|                                |               |   | ACGIH TLV (Un   | ited States, 3/2012). |      |  |
|                                |               |   | TWA: 150 ppm  | 8 hours.              |      |  |
|                                |               |   | STEL: 200 ppm 15 minutes.<br>NIOSH REL (United States, 1/2013). |                       |      |  |
|                                |               |   |   |                       |      |  |
|                                |               |   | TWA: 150 ppm  |                       |      |  |
| Date of issue/Date of revision | : 2016-08-05. | Date of previous issue                  | :2016-08-03.  | Version : 2.98        | 5/14 |  |

# Section 8. Exposure controls/personal protection

| <ul> <li>TWA: 200 ppm 8 hours.</li> <li>TWA: 590 mg/m<sup>3</sup> 8 hours.</li> <li>OSHA PEL (United States).</li> <li>CEIL: 500 ppm</li> <li>TWA: 200 ppm 8 hours.</li> <li>STEL: 300 ppm 15 minutes.</li> <li>OSHA PEL 1989 (United States, 3/1989).</li> <li>TWA: 100 ppm 8 hours.</li> <li>TWA: 375 mg/m<sup>3</sup> 8 hours.</li> <li>STEL: 560 mg/m<sup>3</sup> 15 minutes.</li> <li>OSHA PEL Z2 (United States, 11/2006).</li> <li>TWA: 200 ppm 8 hours.</li> <li>CEIL: 300 ppm 10 minutes.</li> <li>NIOSH REL (United States, 1/2013).</li> <li>TWA: 100 ppm 10 hours.</li> <li>TWA: 375 mg/m<sup>3</sup> 10 hours.</li> <li>STEL: 150 ppm 15 minutes.</li> <li>STEL: 150 ppm 15 minutes.</li> </ul> |
|--|
| <ul> <li>TWA: 200 ppm 8 hours.</li> <li>TWA: 590 mg/m<sup>3</sup> 8 hours.</li> <li>OSHA PEL (United States).</li> <li>CEIL: 500 ppm</li> <li>TWA: 200 ppm 8 hours.</li> <li>STEL: 300 ppm 15 minutes.</li> <li>OSHA PEL 1989 (United States, 3/1989).</li> <li>TWA: 100 ppm 8 hours.</li> <li>TWA: 375 mg/m<sup>3</sup> 8 hours.</li> <li>STEL: 150 ppm 15 minutes.</li> <li>STEL: 560 mg/m<sup>3</sup> 15 minutes.</li> <li>OSHA PEL Z2 (United States, 11/2006).</li> <li>TWA: 200 ppm 8 hours.</li> <li>CEIL: 300 ppm 10 minutes.</li> <li>NIOSH REL (United States, 1/2013).</li> </ul>   |
| TWA: 200 ppm 8 hours.<br>TWA: 590 mg/m <sup>3</sup> 8 hours.<br>OSHA PEL (United States).<br>CEIL: 500 ppm<br>TWA: 200 ppm 8 hours.<br>STEL: 300 ppm 15 minutes.<br>OSHA PEL 1989 (United States, 3/1989).<br>TWA: 100 ppm 8 hours.<br>TWA: 375 mg/m <sup>3</sup> 8 hours.<br>STEL: 150 ppm 15 minutes.<br>STEL: 560 mg/m <sup>3</sup> 15 minutes.<br>OSHA PEL Z2 (United States, 11/2006).  |
| TWA: 200 ppm 8 hours.<br>TWA: 590 mg/m <sup>3</sup> 8 hours.<br>OSHA PEL (United States).<br>CEIL: 500 ppm<br>TWA: 200 ppm 8 hours.<br>STEL: 300 ppm 15 minutes.<br>OSHA PEL 1989 (United States, 3/1989).<br>TWA: 100 ppm 8 hours.<br>TWA: 375 mg/m <sup>3</sup> 8 hours.<br>STEL: 150 ppm 15 minutes.  |
| TWA: 200 ppm 8 hours.<br>TWA: 590 mg/m <sup>3</sup> 8 hours.<br>OSHA PEL (United States).<br>CEIL: 500 ppm<br>TWA: 200 ppm 8 hours.<br>STEL: 300 ppm 15 minutes.<br>OSHA PEL 1989 (United States, 3/1989).<br>TWA: 100 ppm 8 hours.<br>TWA: 375 mg/m <sup>3</sup> 8 hours.   |
| TWA: 200 ppm 8 hours.<br>TWA: 590 mg/m <sup>3</sup> 8 hours.<br>OSHA PEL (United States).<br>CEIL: 500 ppm<br>TWA: 200 ppm 8 hours.<br>STEL: 300 ppm 15 minutes.<br>OSHA PEL 1989 (United States, 3/1989).   |
| TWA: 200 ppm 8 hours.<br>TWA: 590 mg/m <sup>3</sup> 8 hours.<br><b>OSHA PEL (United States).</b><br>CEIL: 500 ppm<br>TWA: 200 ppm 8 hours.   |
| TWA: 200 ppm 8 hours.<br>TWA: 590 mg/m <sup>3</sup> 8 hours.<br>OSHA PEL (United States).  |
| TWA: 200 ppm 8 hours.<br>TWA: 590 mg/m <sup>3</sup> 8 hours.   |
| TWA: 200 ppm 8 hours.  |
| OSHA PEL (United States, 6/2010).  |
| STEL: 885 mg/m <sup>3</sup> 15 minutes.  |
| TWA: 590 mg/m <sup>3</sup> 10 hours.<br>STEL: 300 ppm 15 minutes.  |
| NIOSH REL (United States, 1/2013).<br>TWA: 200 ppm 10 hours.   |
| STEL: 885 mg/m <sup>3</sup> 15 minutes.  |
| TWA: 590 mg/m <sup>3</sup> 8 hours.<br>STEL: 300 ppm 15 minutes.   |
| TWA: 200 ppm 8 hours.  |
| STEL: 885 mg/m <sup>3</sup> 15 minutes.<br>OSHA PEL 1989 (United States, 3/1989).  |
| STEL: 300 ppm 15 minutes.  |
| TWA: 200 ppm 8 hours.<br>TWA: 590 mg/m <sup>3</sup> 8 hours.   |
| ACGIH TLV (United States, 3/2012).   |
| OSHA PEL (United States).<br>TWA: 100 ppm 8 hours.   |
| TWA: 50 ppm 8 hours.   |
| TWA: 435 mg/m <sup>3</sup> 8 hours.<br>ACGIH TLV (United States).  |
| TWA: 100 ppm 8 hours.  |
| STEL: 655 mg/m <sup>3</sup> 15 minutes.<br>OSHA PEL (United States, 6/2010).   |
| STEL: 150 ppm 15 minutes.  |
| TWA: 100 ppm 8 hours.<br>TWA: 435 mg/m <sup>3</sup> 8 hours.   |
| OSHA PEL 1989 (United States, 3/1989).   |
| STEL: 150 ppm 15 minutes.<br>STEL: 651 mg/m <sup>3</sup> 15 minutes.   |
| TWA: 100 ppm 8 hours.<br>TWA: 434 mg/m <sup>3</sup> 8 hours.   |
| ACGIH TLV (United States, 3/2012).   |
| TWA: 710 mg/m <sup>3</sup> 8 hours.  |
| TWA: 150 ppm 8 hours.  |
| STEL: 950 mg/m <sup>3</sup> 15 minutes.<br>OSHA PEL (United States, 6/2010).   |
| TWA: 710 mg/m <sup>3</sup> 10 hours.<br>STEL: 200 ppm 15 minutes.  |
|  |

# Section 8. Exposure controls/personal protection

| di-n-propyl ketone              | ACGIH TLV (United States).                              |
|---------------------------------|---|
| othyl honzono                   | TWA: 50 ppm 8 hours.                                    |
| ethyl benzene                   | ACGIH TLV (United States).<br>STEL: 125 ppm 15 minutes. |
|                                 | ACGIH TLV (United States, 3/2012).                      |
|                                 | TWA: 20 ppm 8 hours.                                    |
|                                 | OSHA PEL 1989 (United States, 3/1989).                  |
|                                 | TWA: 100 ppm 8 hours.                                   |
|                                 | TWA: 435 mg/m <sup>3</sup> 8 hours.                     |
|                                 | STEL: 125 ppm 15 minutes.                               |
|                                 | STEL: 545 mg/m <sup>3</sup> 15 minutes.                 |
|                                 | NIOSH REL (United States, 1/2013).                      |
|                                 | TWA: 100 ppm 10 hours.                                  |
|                                 | TWA: 435 mg/m³ 10 hours.                                |
|                                 | STEL: 125 ppm 15 minutes.                               |
|                                 | STEL: 545 mg/m <sup>3</sup> 15 minutes.                 |
|                                 | OSHA PEL (United States, 6/2010).                       |
|                                 | TWA: 100 ppm 8 hours.                                   |
|                                 | TWA: 435 mg/m <sup>3</sup> 8 hours.                     |
| ethyl 3-ethoxypropionate        | ACGIH TLV (United States).                              |
|                                 | TWA: 50 ppm 8 hours.                                    |
|                                 | STEL: 100 ppm 15 minutes.                               |
| 2-methoxy-1-methylethyl acetate | AIHA WEEL (United States, 10/2011).                     |
|                                 | TWA: 50 ppm 8 hours.                                    |
| 2,6-dimethylheptan-4-one        | ACGIH TLV (United States).                              |
|                                 | TWA: 25 ppm 8 hours.                                    |
|                                 | OSHA PEL (United States).                               |
| 1 mathulaantan 2 ana            | TWA: 50 ppm 8 hours.                                    |
| 4-methylpentan-2-one            | ACGIH TLV (United States).<br>TWA: 20 ppm 8 hours.      |
|                                 | STEL: 75 ppm 15 minutes.                                |
|                                 | OSHA PEL (United States).                               |
|                                 | TWA: 100 ppm 8 hours.                                   |
| 1-propanol, 2-methyl-           | ACGIH TLV (United States, 3/2012).                      |
|                                 | TWA: 50 ppm 8 hours.                                    |
|                                 | TWA: 152 mg/m <sup>3</sup> 8 hours.                     |
|                                 | OSHA PEL 1989 (United States, 3/1989).                  |
|                                 | TWA: 50 ppm 8 hours.                                    |
|                                 | TWA: 150 mg/m <sup>3</sup> 8 hours.                     |
|                                 | NIOSH REL (United States, 1/2013).                      |
|                                 | TWA: 50 ppm 10 hours.                                   |
|                                 | TWA: 150 mg/m <sup>3</sup> 10 hours.                    |
|                                 | OSHA PEL (United States, 6/2010).                       |
|                                 | TWA: 100 ppm 8 hours.                                   |
|                                 | TWA: 300 mg/m <sup>3</sup> 8 hours.                     |
|                                 |   |

| Appropriate engineering<br>controls | : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. |
|-------------------------------------|---|
| Environmental exposure<br>controls  | : Emissions from ventilation or work process equipment should be checked to ensure<br>they comply with the requirements of environmental protection legislation. In some<br>cases, fume scrubbers, filters or engineering modifications to the process equipment<br>will be necessary to reduce emissions to acceptable levels.   |

### Individual protection measures

# Section 8. Exposure controls/personal protection

| -                      |  |
|------------------------|--|
| Hygiene measures       | : Wash hands, forearms and face thoroughly after handling chemical products, before<br>eating, smoking and using the lavatory and at the end of the working period.<br>Appropriate techniques should be used to remove potentially contaminated clothing.<br>Wash contaminated clothing before reusing. Ensure that eyewash stations and safety<br>showers are close to the workstation location.  |
|                        | Selection of personal protective equipment (PPE) is to be established by the employer performing a PPE hazard assessment. In the U.S.A, OSHA requires completion of a documented PPE hazard assessment as described in 29 CFR 1910.132.  |
| Eye/face protection    | : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.   |
| Skin protection        |  |
| Hand protection        | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. |
| Body protection        | : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.   |
| Other skin protection  | : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.  |
| Respiratory protection | : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.  |
|                        | Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/<br>or hazardous fumes. Wet sanding/flatting should be used wherever possible. If<br>exposure cannot be avoided by the provision of local exhaust ventilation, suitable<br>respiratory protective equipment should be used.   |
|                        |  |

### Section 9. Physical and chemical properties

| Appearance                                   |   |
|--|---|
| Physical state                               | : Liquid.   |
| Color  | : Not available.  |
| Odor   | : Not available.  |
| рН   | : Not available.  |
| Melting point                                | : Not available.  |
| Boiling point                                | : 79 - 172 °C (174.2 - 341.6 °F)  |
| Flash point                                  | : Closed cup: -6℃ (21.2뚜)   |
| Evaporation rate                             | : Highest known value: Greater than 1. (butanone) compared with butyl acetate |
| Lower and upper explosive (flammable) limits | : Lower: 1% Upper: 13.1%  |
| Vapor pressure                               | : 10 mm Hg (1.33 kPa) (Highest known value: butyl acetate)                    |
| Vapor density                                | : >1 (Air = 1) (Calculation method)   |
| Volatility                                   | : 76.43% (w/w)  |
| Density                                      | : 0.927 g/cm <sup>3</sup>   |
| Solubility                                   | : Not available.  |

### Section 9. Physical and chemical properties

Partition coefficient: n-: Not available. octanol/water

**Decomposition temperature** : Not available.

### Section 10. Stability and reactivity

| Reactivity                         | : No specific test data related to reactivity available for this product or its ingredients.  |
|------------------------------------|---|
| Chemical stability                 | : The product is stable.  |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur.   |
| Conditions to avoid                | : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. |
| Incompatible materials             | : Reactive or incompatible with the following materials:<br>oxidizing materials   |
| Hazardous decomposition products   | : Under normal conditions of storage and use, hazardous decomposition products should not be produced.  |

### Section 11. Toxicological information

### Information on toxicological effects

**Acute toxicity** 

| Product/ingredient name         | Result                | Species | Dose                    | Exposure |
|---------------------------------|-----------------------|---------|-------------------------|----------|
| butyl acetate                   | LC50 Inhalation Vapor | Rat     | 390 ppm                 | 4 hours  |
| -                               | LD50 Oral             | Rat     | 10768 mg/kg             | -        |
| xylene, mixed isomers           | LC50 Inhalation Vapor | Rat     | 5000 ppm                | 4 hours  |
| •                               | LD50 Oral             | Rat     | 4300 mg/kg              | -        |
| methyl n-amyl ketone            | LD50 Dermal           | Rabbit  | 10306 mg/kg             | -        |
|                                 | LD50 Oral             | Rat     | 1600 mg/kg              | -        |
| butanone                        | LC50 Inhalation Vapor | Rat     | 11700 mg/m <sup>3</sup> | 4 hours  |
|                                 | LD50 Dermal           | Rabbit  | 6480 mg/kg              | -        |
|                                 | LD50 Oral             | Rat     | 2300 mg/kg              | -        |
| toluene                         | LC50 Inhalation Vapor | Rat     | 49000 mg/m <sup>3</sup> | 4 hours  |
|                                 | LD50 Dermal           | Rabbit  | 12124 mg/kg             | -        |
|                                 | LD50 Oral             | Rat     | 636 mg/kg               | -        |
| di-n-propyl ketone              | LC50 Inhalation Vapor | Rat     | 2690 ppm                | 6 hours  |
|                                 | LD50 Dermal           | Rabbit  | 4613 mg/kg              | -        |
|                                 | LD50 Oral             | Rat     | 3040 mg/kg              | -        |
| ethyl benzene                   | LC50 Inhalation Vapor | Rat     | 55000 mg/m <sup>3</sup> | 2 hours  |
|                                 | LD50 Dermal           | Rabbit  | 15486 mg/kg             | -        |
|                                 | LD50 Oral             | Rat     | 3500 mg/kg              | -        |
| ethyl 3-ethoxypropionate        | LD50 Dermal           | Rabbit  | 4080 mg/kg              | -        |
|                                 | LD50 Oral             | Rat     | 3200 mg/kg              | -        |
| 2-methoxy-1-methylethyl acetate | LD50 Oral             | Rat     | 8532 mg/kg              | -        |
| 2,6-dimethylheptan-4-one        | LD50 Dermal           | Rabbit  | 16000 mg/kg             | -        |
|                                 | LD50 Oral             | Rat     | 5750 mg/kg              | -        |
| 4-methylpentan-2-one            | LC50 Inhalation Vapor | Rat     | 2000 ppm                | 4 hours  |
|                                 | LD50 Oral             | Rat     | 2080 mg/kg              | -        |
| 1-propanol, 2-methyl-           | LC50 Inhalation Vapor | Rat     | 19200 mg/m <sup>3</sup> | 4 hours  |
| ,                               | LD50 Dermal           | Rabbit  | 3400 mg/kg              | -        |
|                                 | LD50 Oral             | Rat     | 2460 mg/kg              | -        |

- Not available.

### Section 11. Toxicological information

#### **Sensitization**

Not available.

#### **Mutagenicity**

Not available.

#### **Carcinogenicity**

#### **Classification**

| Product/ingredient name               | OSHA | IARC     | NTP |
|---------------------------------------|------|----------|-----|
| ethyl benzene<br>4-methylpentan-2-one | -    | 2B<br>2B | -   |

#### **Reproductive toxicity**

Not available.

#### **Teratogenicity**

| Product/ingredient name | Result | Species                            | Dose | Exposure |
|-------------------------|--------|------------------------------------|------|----------|
| toluene                 |        | Mammal -<br>species<br>unspecified | -    | -        |

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

| Name                     | Category   | Route of exposure | Target organs                |
|--------------------------|------------|-------------------|------------------------------|
| butyl acetate            | Category 3 | Not applicable.   | Narcotic effects             |
| butanone                 | Category 3 | Not applicable.   | Narcotic effects             |
| toluene                  | Category 3 | Not applicable.   | Narcotic effects             |
| 2,6-dimethylheptan-4-one | Category 3 | Not applicable.   | Respiratory tract irritation |
| 4-methylpentan-2-one     | Category 3 | Not applicable.   | Respiratory tract irritation |
| 1-propanol, 2-methyl-    | Category 3 | Not applicable.   | Respiratory tract irritation |

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

| Name          |            | Route of<br>exposure | Target organs |
|---------------|------------|----------------------|---------------|
| ethyl benzene | Category 2 | Not determined       | ears          |

#### **Aspiration hazard**

| Name | Result   |
|------|--|
|      | ASPIRATION HAZARD - Category 1<br>ASPIRATION HAZARD - Category 1 |

| Information on the likely<br>routes of exposure | 1 | Not available.  |
|---|---|---|
| Potential acute health effects                  |   |   |
| Eye contact                                     | ÷ | Causes serious eye irritation.  |
| Inhalation                                      | : | Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. |
| Skin contact                                    | ÷ | Causes skin irritation.   |
| Ingestion                                       | 1 | Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.   |

#### Symptoms related to the physical, chemical and toxicological characteristics

| Date of issue/Date of revision | : 2016-08-05. | Date of previous issue | :2016-08-03. | Versi |
|--------------------------------|---------------|------------------------|--------------|-------|
|                                |               |                        |              |       |

# Section 11. Toxicological information

| Eye contact  | : Adverse symptoms may include the following:<br>pain or irritation<br>watering<br>redness  |
|--------------|---|
| Inhalation   | : Adverse symptoms may include the following:<br>nausea or vomiting<br>headache<br>drowsiness/fatigue<br>dizziness/vertigo<br>unconsciousness<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations |
| Skin contact | : Adverse symptoms may include the following:<br>irritation<br>redness<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations  |
| Ingestion    | : Adverse symptoms may include the following:<br>reduced fetal weight<br>increase in fetal deaths<br>skeletal malformations   |

| Delayed and immediate effect   | nd also chronic effects from short and long term exposure                           |    |
|--------------------------------|---|----|
| Short term exposure            |   |    |
| Potential immediate<br>effects | Not available.  |    |
| Potential delayed effects      | Not available.  |    |
| Long term exposure             |   |    |
| Potential immediate<br>effects | Not available.  |    |
| Potential delayed effects      | Not available.  |    |
| Potential chronic health eff   |   |    |
| Not available.                 |   |    |
| General                        | May cause damage to organs through prolonged or repeated exposure.                  |    |
| Carcinogenicity                | Suspected of causing cancer. Risk of cancer depends on duration and level exposure. | of |
| Mutagenicity                   | No known significant effects or critical hazards.                                   |    |
| Teratogenicity                 | Suspected of damaging the unborn child.   |    |
| Developmental effects          | No known significant effects or critical hazards.                                   |    |
| Fertility effects              | Suspected of damaging fertility.  |    |

### Section 12. Ecological information

Data available upon request.

### Section 13. Disposal considerations

**Disposal methods** 

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

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

|                               | DOT<br>Classification   | TDG<br>Classification | Mexico<br>Classification | ADR/RID  | IMDG   | ΙΑΤΑ   |
|-------------------------------|---|-----------------------|--------------------------|--|--------|--------|
| UN number                     | UN1263  | UN1263                | UN1263                   | UN1263   | UN1263 | UN1263 |
| UN proper<br>shipping name    | Paint   | Paint                 | Paint                    | Paint  | Paint  | Paint  |
| Transport<br>hazard class(es) | 3   | 3                     | 3                        | 3  | 3      | 3      |
| Packing group                 | II  | II                    | 11                       | 11   | 11     |        |
| Environmental<br>hazards      | No.   | No.                   | No.                      | No.  | No.    | No.    |
| Additional<br>information     | Reportable<br>quantity<br>938.64 lbs /<br>426.14 kg [121.<br>44 gal / 459.7<br>L]<br>Package sizes<br>shipped in<br>quantities less<br>than the<br>product<br>reportable<br>quantity are<br>not subject to<br>the RQ<br>(reportable<br>quantity)<br>transportation<br>requirements. |                       |                          | Special<br>provisions<br>640 (C)<br>Tunnel code<br>(D/E) | -      |        |

### Section 1/ Transport information

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

### Section 14. Transport information

Transport in bulk according : Not available. to Annex II of MARPOL 73/78 and the IBC Code

### Section 15. Regulatory information

U.S. Federal regulations

: United States inventory (TSCA 8b): All components are listed or exempted.

**Clean Air Act (CAA) 112 regulated toxic substances**: 4-methylpentan-2-one; xylene, mixed isomers; ethyl benzene; toluene; benzene

#### SARA 313

|                                 | Product name | CAS number | %                     |
|---------------------------------|--------------|------------|-----------------------|
| Form R - Reporting requirements | toluene      | 108-88-3   | 10.65<br>5.01<br>2.50 |

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

#### **State regulations**

| Massachusetts | : None of the components are listed. |
|---------------|--------------------------------------|
| New York      | : None of the components are listed. |
| New Jersey    | : None of the components are listed. |
| Pennsylvania  | : None of the components are listed. |

#### California Prop. 65

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

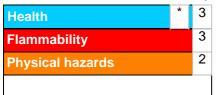
| Ingredient name                               |   | Cancer  | Reproductive   | No significant risk<br>level                      | Maximum<br>acceptable dosage<br>level |
|---|---|---|--|---|---------------------------------------|
| toluene                                       |   | No.   | Yes.   | No.   | No.                                   |
| ethyl benzene                                 |   | Yes.  | No.  | No.   | No.                                   |
| 4-methylpentan-2-one                          |   | Yes.  | Yes.   | No.   | No.                                   |
| silica, crystalline-quartz                    |   | Yes.  | No.  | No.   | No.                                   |
| benzene                                       |   | Yes.  | Yes.   | No.   | No.                                   |
| Canada inventory<br>International regulations | : All compor  | nents are li  | sted or exempted.  |   |                                       |
| International lists                           | China invo<br>Japan invo<br>Korea invo<br>Malaysia I<br>New Zeala<br>Philippine | entory (IEC<br>entory: No<br>entory: All<br>nventory (<br>and Inventory<br>es inventor) | <b>CSC)</b> : All component<br>to determined.<br>components are liste<br>(EHS Register): Not | determined.<br>NZIOC): Not determined.<br>rmined. | 1.                                    |

| Chemical Weapons<br>Convention List Schedule<br>I Chemicals  | : Not listed |
|--|--------------|
| Chemical Weapons<br>Convention List Schedule<br>II Chemicals | : Not listed |
| Chemical Weapons<br>Convention List Schedule                 | : Not listed |

**III Chemicals** 

### Section 16. Other information

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



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

| <u>History</u>                 |  |
|--------------------------------|--|
| Date of printing               | : 2016-08-05.  |
| Date of issue/Date of revision | : 2016-08-05.  |
| Date of previous issue         | : 2016-08-03.  |
| Version                        | : 2.98   |
| Key to abbreviations           | <ul> <li>ATE = Acute Toxicity Estimate<br/>BCF = Bioconcentration Factor<br/>GHS = Globally Harmonized System of Classification and Labelling of Chemicals<br/>IATA = International Air Transport Association<br/>IBC = Internediate Bulk Container<br/>IMDG = International Maritime Dangerous Goods<br/>LogPow = logarithm of the octanol/water partition coefficient<br/>MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,<br/>1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)<br/>UN = United Nations</li> </ul> |
| References                     | : Not available.   |

✓ Indicates information that has changed from previously issued version.

### Notice to reader

IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

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