

# SAFETY DATA SHEET

According to 29 CFR 1910.1200  
C14512

## Section 1. Identification

**Product name** : KRYSTAL® High Solids Conversion Varnish  
Dull

**Product code** : C14512

**Other means of identification** : Not available.

**Product type** : Liquid.

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

Paint or paint related material.

**Manufacturer** : M. L. CAMPBELL  
101 W. Prospect Avenue  
Cleveland, OH 44115

**Emergency telephone number of the company** : (800) 424-9300

**Product Information Telephone Number** : (800) 364-1359

**Transportation Emergency Telephone Number** : (800) 424-9300

## 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** : FLAMMABLE LIQUIDS - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1  
CARCINOGENICITY - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 11.8% (oral), 22.6% (dermal), 23.5% (inhalation)

### GHS label elements

#### **Hazard pictograms**



#### **Signal word**

: Danger

#### **Hazard statements**

: Highly flammable liquid and vapor.  
Causes serious eye damage.  
May cause drowsiness or dizziness.  
Suspected of causing cancer.  
May cause damage to organs through prolonged or repeated exposure.

### Precautionary statements

## Section 2. Hazards identification

- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Do not breathe vapor.
- Response** : IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
- Storage** : Store locked up. Store in a well-ventilated place. Keep container tightly closed.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY. Contains Formaldehyde - a potential cancer hazard. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.
- Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.
- Hazards not otherwise classified** : DANGER: Rags, steel wool, other waste soaked with this product, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations.
- Hazards identified when used** : No known significant effects or critical hazards.

## Section 3. Composition/information on ingredients

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

### CAS number/other identifiers

Ingredient name	% by weight	Identifiers
n-Butyl Acetate	≥25 - ≤50	123-86-4
Ethanol	≤10	64-17-5
1-Butanol	≤10	71-36-3
Isobutylated Urea-Formaldehyde Polymer	≤5	68002-18-6
Methyl n-Amyl Ketone	≤3	110-43-0
1-Methoxy-2-propanol	≤3	107-98-2
Ethyl Acetate	≤3	141-78-6
Amorphous Precipitated Silica	≤3	112926-00-8
2-Methyl-1-propanol	≤3	78-83-1
Xylene, mixed isomers	≤3	1330-20-7
Cellulose Nitrate	≤3	9004-70-0
Dimethyl Carbonate	≤3	616-38-6
Ethylbenzene	<1	100-41-4
Heavy Aliphatic Solvent	≤0.3	64742-82-1
Light Aromatic Hydrocarbons	≤0.3	64742-95-6

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

## Section 3. Composition/information on ingredients

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

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

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. 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. 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** : Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. 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. Chemical burns must be treated promptly by a 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 health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : Can cause central nervous system (CNS) depression.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness

## Section 4. First aid measures

- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : 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.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
metal oxide/oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

- Remark** : Flammable liquid.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 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. Absorb with an inert 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. 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.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Contains a formaldehyde-based resin which, under certain conditions of use, may release formaldehyde. Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

**Control parameters**

**Occupational exposure limits (OSHA United States)**

Ingredient name	CAS #	Exposure limits
n-Butyl Acetate	123-86-4	<b>ACGIH TLV (United States, 1/2025) [Butyl acetates]</b> STEL 15 minutes: 150 ppm. TWA 8 hours: 50 ppm. <b>NIOSH REL (United States, 10/2020)</b> TWA 10 hours: 150 ppm. TWA 10 hours: 710 mg/m <sup>3</sup> . STEL 15 minutes: 200 ppm. STEL 15 minutes: 950 mg/m <sup>3</sup> . <b>OSHA PEL (United States, 5/2018)</b> TWA 8 hours: 150 ppm. TWA 8 hours: 710 mg/m <sup>3</sup> .
Ethanol	64-17-5	<b>ACGIH TLV (United States, 1/2025) A3.</b> STEL 15 minutes: 1000 ppm. <b>NIOSH REL (United States, 10/2020)</b> TWA 10 hours: 1000 ppm. TWA 10 hours: 1900 mg/m <sup>3</sup> . <b>OSHA PEL (United States, 5/2018)</b> TWA 8 hours: 1000 ppm. TWA 8 hours: 1900 mg/m <sup>3</sup> .
1-Butanol	71-36-3	<b>ACGIH TLV (United States, 1/2025)</b> TWA 8 hours: 20 ppm. <b>NIOSH REL (United States, 10/2020)</b> Absorbed through skin. CEIL: 50 ppm. CEIL: 150 mg/m <sup>3</sup> . <b>OSHA PEL (United States, 5/2018)</b> TWA 8 hours: 100 ppm. TWA 8 hours: 300 mg/m <sup>3</sup> .
Isobutylated Urea-Formaldehyde Polymer Methyl n-Amyl Ketone	68002-18-6 110-43-0	None. <b>ACGIH TLV (United States, 1/2025)</b> TWA 8 hours: 50 ppm. <b>NIOSH REL (United States, 10/2020)</b> TWA 10 hours: 100 ppm. TWA 10 hours: 465 mg/m <sup>3</sup> . <b>OSHA PEL (United States, 5/2018)</b> TWA 8 hours: 100 ppm. TWA 8 hours: 465 mg/m <sup>3</sup> .
1-Methoxy-2-propanol	107-98-2	<b>ACGIH TLV (United States, 1/2025) A4.</b> TWA 8 hours: 50 ppm. TWA 8 hours: 184 mg/m <sup>3</sup> . STEL 15 minutes: 100 ppm.

## Section 8. Exposure controls/personal protection

Ethyl Acetate	141-78-6	STEL 15 minutes: 369 mg/m <sup>3</sup> . <b>NIOSH REL (United States, 10/2020)</b> TWA 10 hours: 100 ppm. TWA 10 hours: 360 mg/m <sup>3</sup> . STEL 15 minutes: 150 ppm. STEL 15 minutes: 540 mg/m <sup>3</sup> . <b>ACGIH TLV (United States, 1/2025)</b> TWA 8 hours: 400 ppm. TWA 8 hours: 1440 mg/m <sup>3</sup> . <b>NIOSH REL (United States, 10/2020)</b> TWA 10 hours: 400 ppm. TWA 10 hours: 1400 mg/m <sup>3</sup> . <b>OSHA PEL (United States, 5/2018)</b> TWA 8 hours: 400 ppm. TWA 8 hours: 1400 mg/m <sup>3</sup> .
Amorphous Precipitated Silica	112926-00-8	<b>NIOSH REL (United States, 10/2020)</b> <b>[SILICA, AMORPHOUS] NIA.</b> TWA 10 hours: 6 mg/m <sup>3</sup> . <b>OSHA PEL Z3 (United States, 6/2016)</b> <b>[Silica, Amorphous]</b> TWA 8 hours: 20 mppcf. TWA 8 hours: 80 / (%SiO <sub>2</sub> ) mg/m <sup>3</sup> . <b>ACGIH TLV (United States, 1/2025)</b> TWA 8 hours: 50 ppm. TWA 8 hours: 152 mg/m <sup>3</sup> . <b>NIOSH REL (United States, 10/2020)</b> TWA 10 hours: 50 ppm. TWA 10 hours: 150 mg/m <sup>3</sup> . <b>OSHA PEL (United States, 5/2018)</b> TWA 8 hours: 100 ppm. TWA 8 hours: 300 mg/m <sup>3</sup> .
2-Methyl-1-propanol	78-83-1	<b>ACGIH TLV (United States, 1/2025)</b> TWA 8 hours: 50 ppm. TWA 8 hours: 152 mg/m <sup>3</sup> . <b>NIOSH REL (United States, 10/2020)</b> TWA 10 hours: 50 ppm. TWA 10 hours: 150 mg/m <sup>3</sup> . <b>OSHA PEL (United States, 5/2018)</b> TWA 8 hours: 100 ppm. TWA 8 hours: 300 mg/m <sup>3</sup> .
Xylene, mixed isomers	1330-20-7	<b>ACGIH TLV (United States, 1/2025) [p-xylene and mixtures containing p-xylene]</b> A4. Ototoxicant. TWA 8 hours: 20 ppm. <b>OSHA PEL (United States, 5/2018)</b> <b>[Xylenes]</b> TWA 8 hours: 100 ppm. TWA 8 hours: 435 mg/m <sup>3</sup> .
Cellulose Nitrate Dimethyl Carbonate Ethylbenzene	9004-70-0 616-38-6 100-41-4	None. None. <b>ACGIH TLV (United States, 1/2025) A3.</b> Ototoxicant. TWA 8 hours: 20 ppm. <b>NIOSH REL (United States, 10/2020)</b> TWA 10 hours: 100 ppm. TWA 10 hours: 435 mg/m <sup>3</sup> . STEL 15 minutes: 125 ppm. STEL 15 minutes: 545 mg/m <sup>3</sup> . <b>OSHA PEL (United States, 5/2018)</b> TWA 8 hours: 100 ppm. TWA 8 hours: 435 mg/m <sup>3</sup> .
Heavy Aliphatic Solvent Light Aromatic Hydrocarbons	64742-82-1 64742-95-6	None. None.

### [Occupational exposure limits \(Canada\)](#)

# Section 8. Exposure controls/personal protection

Ingredient name	CAS #	Exposure limits
n-butyl acetate	123-86-4	<p><b>CA Saskatchewan Provincial (Canada, 4/2021)</b>                      STEL 15 minutes: 200 ppm.                      TWA 8 hours: 150 ppm.</p> <p><b>CA British Columbia Provincial (Canada, 6/2025) [butyl acetate, all isomers]</b>                      STEL 15 minutes: 150 ppm.                      TWA 8 hours: 50 ppm.</p> <p><b>CA Ontario Provincial (Canada, 6/2019) [butyl acetates, all isomers]</b>                      STEL 15 minutes: 150 ppm.                      TWA 8 hours: 50 ppm.</p> <p><b>CA Quebec Provincial (Canada, 2/2024) [butyl acetates]</b>                      STEV 15 minutes: 150 ppm.                      TWAEV 8 hours: 50 ppm.</p> <p><b>CA Alberta Provincial (Canada, 3/2023)</b>                      OEL 15 minutes: 200 ppm.                      OEL 15 minutes: 950 mg/m<sup>3</sup>.                      OEL 8 hours: 150 ppm.                      OEL 8 hours: 713 mg/m<sup>3</sup>.</p>
Ethyl alcohol	64-17-5	<p><b>CA Saskatchewan Provincial (Canada, 4/2021)</b>                      STEL 15 minutes: 1250 ppm.                      TWA 8 hours: 1000 ppm.</p> <p><b>CA British Columbia Provincial (Canada, 6/2025)</b>                      STEL 15 minutes: 1000 ppm.</p> <p><b>CA Ontario Provincial (Canada, 6/2019)</b>                      STEL 15 minutes: 1000 ppm.</p> <p><b>CA Quebec Provincial (Canada, 2/2024) C3.</b>                      STEV 15 minutes: 1000 ppm.</p> <p><b>CA Alberta Provincial (Canada, 3/2023)</b>                      OEL 8 hours: 1000 ppm.                      OEL 8 hours: 1880 mg/m<sup>3</sup>.</p>
Normal butyl alcohol	71-36-3	<p><b>CA Saskatchewan Provincial (Canada, 4/2021)</b>                      STEL 15 minutes: 30 ppm.                      TWA 8 hours: 20 ppm.</p> <p><b>CA British Columbia Provincial (Canada, 6/2025)</b>                      TWA 8 hours: 15 ppm.                      C: 30 ppm.</p> <p><b>CA Ontario Provincial (Canada, 6/2019)</b>                      TWA 8 hours: 20 ppm.</p> <p><b>CA Quebec Provincial (Canada, 2/2024)</b>                      TWAEV 8 hours: 20 ppm.</p> <p><b>CA Alberta Provincial (Canada, 3/2023)</b>                      OEL 8 hours: 60 mg/m<sup>3</sup>.                      OEL 8 hours: 20 ppm.</p>
Methyl n-amyl ketone	110-43-0	<p><b>CA Saskatchewan Provincial (Canada, 4/2021)</b>                      STEL 15 minutes: 60 ppm.                      TWA 8 hours: 50 ppm.</p>

## Section 8. Exposure controls/personal protection

Propylene glycol monomethyl ether	107-98-2	<p><b>CA British Columbia Provincial (Canada, 6/2025)</b> TWA 8 hours: 50 ppm.</p> <p><b>CA Ontario Provincial (Canada, 6/2019)</b> TWA 8 hours: 25 ppm. TWA 8 hours: 115 mg/m<sup>3</sup>.</p> <p><b>CA Quebec Provincial (Canada, 2/2024)</b> TWAEV 8 hours: 50 ppm. TWAEV 8 hours: 233 mg/m<sup>3</sup>.</p> <p><b>CA Alberta Provincial (Canada, 3/2023)</b> OEL 8 hours: 233 mg/m<sup>3</sup>. OEL 8 hours: 50 ppm.</p> <p><b>CA Saskatchewan Provincial (Canada, 4/2021)</b> STEL 15 minutes: 150 ppm. TWA 8 hours: 100 ppm.</p> <p><b>CA British Columbia Provincial (Canada, 6/2025)</b> STEL 15 minutes: 100 ppm. TWA 8 hours: 50 ppm.</p> <p><b>CA Ontario Provincial (Canada, 6/2019)</b> TWA 8 hours: 50 ppm. STEL 15 minutes: 100 ppm.</p> <p><b>CA Quebec Provincial (Canada, 2/2024)</b> TWAEV 8 hours: 50 ppm. STEV 15 minutes: 100 ppm.</p> <p><b>CA Alberta Provincial (Canada, 3/2023)</b> OEL 8 hours: 100 ppm. OEL 15 minutes: 553 mg/m<sup>3</sup>. OEL 8 hours: 369 mg/m<sup>3</sup>. OEL 15 minutes: 150 ppm.</p>
Isobutyl alcohol	78-83-1	<p><b>CA Saskatchewan Provincial (Canada, 4/2021)</b> STEL 15 minutes: 60 ppm. TWA 8 hours: 50 ppm.</p> <p><b>CA British Columbia Provincial (Canada, 6/2025)</b> TWA 8 hours: 50 ppm.</p> <p><b>CA Ontario Provincial (Canada, 6/2019)</b> TWA 8 hours: 50 ppm.</p> <p><b>CA Quebec Provincial (Canada, 2/2024)</b> TWAEV 8 hours: 50 ppm. TWAEV 8 hours: 152 mg/m<sup>3</sup>.</p> <p><b>CA Alberta Provincial (Canada, 3/2023)</b> OEL 8 hours: 50 ppm. OEL 8 hours: 152 mg/m<sup>3</sup>.</p>
Xylene	1330-20-7	<p><b>CA Saskatchewan Provincial (Canada, 4/2021) [Xylene]</b> STEL 15 minutes: 150 ppm. TWA 8 hours: 100 ppm.</p> <p><b>CA British Columbia Provincial (Canada, 6/2025) [xylene, all isomers]</b> TWA 8 hours: 20 ppm.</p> <p><b>CA Ontario Provincial (Canada, 6/2019) [Xylene (o-, m-, p-isomers)]</b> STEL 15 minutes: 150 ppm. TWA 8 hours: 100 ppm.</p>

## Section 8. Exposure controls/personal protection

Ethylbenzene	100-41-4	<p><b>CA Quebec Provincial (Canada, 2/2024) [Xylene]</b>            TWAEV 8 hours: 100 ppm.            TWAEV 8 hours: 434 mg/m<sup>3</sup>.            STEV 15 minutes: 150 ppm.            STEV 15 minutes: 651 mg/m<sup>3</sup>.</p> <p><b>CA Alberta Provincial (Canada, 3/2023) [Dimethylbenzene]</b>            OEL 8 hours: 100 ppm.            OEL 15 minutes: 651 mg/m<sup>3</sup>.            OEL 15 minutes: 150 ppm.            OEL 8 hours: 434 mg/m<sup>3</sup>.</p> <p><b>CA Saskatchewan Provincial (Canada, 4/2021)</b>            STEL 15 minutes: 125 ppm.            TWA 8 hours: 100 ppm.</p> <p><b>CA British Columbia Provincial (Canada, 6/2025) Carc 2B.</b>            TWA 8 hours: 20 ppm.</p> <p><b>CA Ontario Provincial (Canada, 6/2019)</b>            TWA 8 hours: 20 ppm.</p> <p><b>CA Quebec Provincial (Canada, 2/2024) C3.</b>            TWAEV 8 hours: 20 ppm.</p> <p><b>CA Alberta Provincial (Canada, 3/2023)</b>            OEL 8 hours: 100 ppm.            OEL 8 hours: 434 mg/m<sup>3</sup>.            OEL 15 minutes: 543 mg/m<sup>3</sup>.            OEL 15 minutes: 125 ppm.</p>
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**Occupational exposure limits (Mexico)**

<b>Ingredient name</b>	<b>CAS #</b>	<b>Exposure limits</b>
n-Butyl Acetate	123-86-4	<b>NOM-010-STPS-2014 (Mexico, 4/2016)</b> TWA 8 hours: 150 ppm. STEL 15 minutes: 200 ppm.
Ethanol	64-17-5	<b>NOM-010-STPS-2014 (Mexico, 4/2016) A3.</b> STEL 15 minutes: 1000 ppm.
1-Butanol	71-36-3	<b>NOM-010-STPS-2014 (Mexico, 4/2016)</b> TWA 8 hours: 20 ppm.
Methyl n-Amyl Ketone	110-43-0	<b>NOM-010-STPS-2014 (Mexico, 4/2016)</b> TWA 8 hours: 50 ppm.
1-Methoxy-2-propanol	107-98-2	<b>NOM-010-STPS-2014 (Mexico, 4/2016)</b> STEL 15 minutes: 150 ppm. TWA 8 hours: 100 ppm.
Ethyl Acetate	141-78-6	<b>NOM-010-STPS-2014 (Mexico, 4/2016)</b> TWA 8 hours: 400 ppm.
2-Methyl-1-propanol	78-83-1	<b>NOM-010-STPS-2014 (Mexico, 4/2016)</b> TWA 8 hours: 50 ppm.
Xylene, mixed isomers	1330-20-7	<b>NOM-010-STPS-2014 (Mexico, 4/2016) [Xileno, mezcla] A4.</b> STEL 15 minutes: 150 ppm. TWA 8 hours: 100 ppm.

**Biological exposure indices (United States)**

## Section 8. Exposure controls/personal protection

Ingredient name	Exposure indices
Xylene, mixed isomers	<b>ACGIH BEI (United States, 1/2025) [xylenes (technical or commercial grades)]</b> BEI: 0.3 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift.
Ethylbenzene	<b>ACGIH BEI (United States, 1/2025)</b> BEI: 150 mg/g creatinine, sum of mandelic acid and phenylglyoxylic acid [in urine]. Sampling time: end of shift.

### Biological exposure indices (Canada)

No exposure indices known.

### Biological exposure indices (Mexico)

Ingredient name	Exposure indices
Xylene, mixed isomers	<b>Official Mexican STANDARD NOM-047-SSA1-2011, Environmental Health-Biological exposure indices for personnel occupationally exposed to chemical substances. (Mexico, 6/2012) [xilenos (grado técnico o comercial)]</b> BEI: 1.5 g/g creatinine, methyl hippuric acids [in urine]. Sampling time: at the end of the work shift.

**Appropriate engineering 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 controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

### 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.

## Section 8. Exposure controls/personal protection

- 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 anti-static 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** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

- Physical state** : Liquid.
- Color** : Clear.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not available.
- Boiling point or initial boiling point and boiling range** : 70°C (158°F)
- Flash point** : Closed cup: 16°C (60.8°F) [Pensky-Martens Closed Cup]
- Evaporation rate** : 3.91 (butyl acetate = 1)
- Flammability** : Flammable liquid.
- Lower and upper explosion limit/flammability limit** : Lower: 1%  
Upper: 19%
- Vapor pressure** : 11.5 kPa (86 mm Hg)
- Relative vapor density** : 1.5 [Air = 1]
- Relative density** : 0.98
- Density** : 0.98 g/cm<sup>3</sup>
- Solubility(ies)** :

Media	Result
cold water	Not soluble

- Partition coefficient: n-octanol/water** : Not applicable.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Dynamic (room temperature): Not available.  
Kinematic (room temperature): Not available.  
Kinematic (40°C (104°F)): >20.5 mm<sup>2</sup>/s (>20.5 cSt)
- Molecular weight** : Not applicable.
- Particle characteristics**
- Median particle size** : Not applicable.

## Section 9. Physical and chemical properties

**Heat of combustion** : 16.401 kJ/g

## 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. Do not allow vapor to accumulate in low or confined areas.
- Incompatible materials** : Reactive or incompatible with the following materials:  
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**

n-Butyl Acetate

##### **Result**

**Rat - Oral - LD50**

10768 mg/kg

Toxic effects: Behavioral - Somnolence (general depressed activity) Lung, Thorax, or Respiration - Other changes Liver - Other changes

**Rabbit - Dermal - LD50**

>17600 mg/kg

**Rat - Oral - LD50**

7 g/kg

**Rat - Inhalation - LC50 Vapor**

124700 mg/m<sup>3</sup> [4 hours]

**Rat - Oral - LD50**

790 mg/kg

Toxic effects: Liver - Fatty liver degeneration Kidney, Ureter, and Bladder - Other changes Blood - Other changes

**Rabbit - Dermal - LD50**

3400 mg/kg

**Rat - Inhalation - LC50 Vapor**

24000 mg/m<sup>3</sup> [4 hours]

**Rat - Oral - LD50**

>5 g/kg

Toxic effects: Olfaction - Other changes Behavioral - Somnolence (general depressed activity) Behavioral - Food intake (animal)

**Rabbit - Dermal - LD50**

>5 g/kg

Toxic effects: Skin After systemic exposure - Dermatitis, other

**Rat - Oral - LD50**

1600 mg/kg

Toxic effects: Behavioral - Ataxia Lung, Thorax, or Respiration -

Ethanol

1-Butanol

Isobutylated Urea-Formaldehyde Polymer

Methyl n-Amyl Ketone

## Section 11. Toxicological information

1-Methoxy-2-propanol	Respiratory depression <b>Rabbit - Dermal - LD50</b> 13 g/kg <b>Rat - Oral - LD50</b> 6600 mg/kg <u>Toxic effects:</u> Brain and Coverings - Other degenerative changes Behavioral - General anesthetic Lung, Thorax, or Respiration - Dyspnea
Ethyl Acetate	<b>Rat - Oral - LD50</b> 5620 mg/kg
2-Methyl-1-propanol	<b>Rat - Oral - LD50</b> 2460 mg/kg <b>Rabbit - Dermal - LD50</b> 3400 mg/kg <b>Rat - Inhalation - LC50 Vapor</b> 19200 mg/m <sup>3</sup> [4 hours]
Xylene, mixed isomers	<b>Rat - Oral - LD50</b> 4300 mg/kg <u>Toxic effects:</u> Liver - Other changes Kidney, Ureter, and Bladder - Other changes <b>Rat - Inhalation - LC50 Gas.</b> 6700 ppm [4 hours] <u>Toxic effects:</u> Behavioral - Somnolence (general depressed activity)
Cellulose Nitrate	<b>Rat - Oral - LD50</b> >5 g/kg
Dimethyl Carbonate	<b>Rat - Oral - LD50</b> 13 g/kg <b>Rabbit - Dermal - LD50</b> >5 g/kg
Ethylbenzene	<b>Rat - Oral - LD50</b> 3500 mg/kg <u>Toxic effects:</u> Liver - Other changes Kidney, Ureter, and Bladder - Other changes <b>Rabbit - Dermal - LD50</b> >5000 mg/kg
Light Aromatic Hydrocarbons	<b>Rat - Oral - LD50</b> 8400 mg/kg <u>Toxic effects:</u> Behavioral - Somnolence (general depressed activity) Behavioral - Tremor Lung, Thorax, or Respiration - Other changes

**Conclusion/Summary [Product]** : Not available.

### Skin corrosion/irritation

#### **Product/ingredient name**

n-Butyl Acetate

#### **Result**

**Rabbit - Skin - Moderate irritant**

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 mg

Ethanol

**Rabbit - Skin - Mild irritant**

Amount/concentration applied: 400 mg

**Rabbit - Skin - Moderate irritant**

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 20 mg

1-Butanol

**Rabbit - Skin - Moderate irritant**

# Section 11. Toxicological information

Methyl n-Amyl Ketone	<u>Duration of treatment/exposure:</u> 24 hours <u>Amount/concentration applied:</u> 20 mg <b>Rabbit - Skin - Mild irritant</b>
1-Methoxy-2-propanol	<u>Duration of treatment/exposure:</u> 24 hours <u>Amount/concentration applied:</u> 14 mg <b>Rabbit - Skin - Mild irritant</b>
Xylene, mixed isomers	<u>Amount/concentration applied:</u> 500 mg <b>Rat - Skin - Mild irritant</b> <u>Duration of treatment/exposure:</u> 8 hours <u>Amount/concentration applied:</u> 60 uL <b>Rabbit - Skin - Moderate irritant</b>
Ethylbenzene	<u>Duration of treatment/exposure:</u> 24 hours <u>Amount/concentration applied:</u> 500 mg <b>Rabbit - Skin - Moderate irritant</b> <u>Amount/concentration applied:</u> 100 % <b>Rabbit - Skin - Mild irritant</b> <u>Duration of treatment/exposure:</u> 24 hours <u>Amount/concentration applied:</u> 15 mg

**Conclusion/Summary [Product]** : Not available.

## Serious eye damage/eye irritation

### Product/ingredient name

### Result

n-Butyl Acetate	<b>Rabbit - Eyes - Moderate irritant</b> <u>Amount/concentration applied:</u> 100 mg
Ethanol	<b>Rabbit - Eyes - Mild irritant</b> <u>Duration of treatment/exposure:</u> 24 hours <u>Amount/concentration applied:</u> 500 mg <b>Rabbit - Eyes - Moderate irritant</b> <u>Duration of treatment/exposure:</u> 0.066666667 minutes <u>Amount/concentration applied:</u> 100 mg <b>Rabbit - Eyes - Moderate irritant</b> <u>Amount/concentration applied:</u> 100 uL <b>Rabbit - Eyes - Severe irritant</b> <u>Amount/concentration applied:</u> 500 mg <b>Rabbit - Eyes - Mild irritant</b> <u>Duration of treatment/exposure:</u> 1 hours <u>Amount/concentration applied:</u> 50 pph
1-Butanol	<b>Rabbit - Eyes - Severe irritant</b> <u>Duration of treatment/exposure:</u> 24 hours <u>Amount/concentration applied:</u> 2 mg <b>Rabbit - Eyes - Severe irritant</b> <u>Amount/concentration applied:</u> 0.005 MI <b>Rabbit - Eyes - Severe irritant</b> <u>Amount/concentration applied:</u> 1.62 mg
Isobutylated Urea-Formaldehyde Polymer	<b>Rabbit - Eyes - Severe irritant</b> <u>Duration of treatment/exposure:</u> 24 hours <u>Amount/concentration applied:</u> 100 uL
1-Methoxy-2-propanol	<b>Rabbit - Eyes - Mild irritant</b> <u>Duration of treatment/exposure:</u> 24 hours <u>Amount/concentration applied:</u> 500 mg
Xylene, mixed isomers	<b>Rabbit - Eyes - Mild irritant</b> <u>Amount/concentration applied:</u> 87 mg <b>Rabbit - Eyes - Severe irritant</b> <u>Duration of treatment/exposure:</u> 24 hours

# Section 11. Toxicological information

Ethylbenzene

Amount/concentration applied: 5 mg

**Rabbit - Eyes - Severe irritant**

Light Aromatic Hydrocarbons

Amount/concentration applied: 500 mg

**Rabbit - Eyes - Mild irritant**

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 100 uL

**Conclusion/Summary [Product]** : Not available.

**Respiratory corrosion/irritation**

Not available.

**Conclusion/Summary [Product]** : Not available.

**Respiratory or skin sensitization**

Not available.

**Skin**

**Conclusion/Summary [Product]** : Not available.

**Respiratory**

**Conclusion/Summary [Product]** : Not available.

**Germ cell mutagenicity**

Not available.

**Conclusion/Summary [Product]** : Not available.

**Carcinogenicity**

Not available.

**Conclusion/Summary [Product]** : Not available.

**Classification**

Product/ingredient name	OSHA	IARC	NTP
Ethanol	-	1	-
Amorphous Precipitated Silica	-	3	-
Xylene, mixed isomers	-	3	-
Ethylbenzene	-	2B	-

**Reproductive toxicity**

Not available.

**Conclusion/Summary [Product]** : Not available.

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

## Section 11. Toxicological information

Product/ingredient name	Result
n-Butyl Acetate	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Ethanol	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
1-Butanol	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Methyl n-Amyl Ketone	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
1-Methoxy-2-propanol	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Ethyl Acetate	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
2-Methyl-1-propanol	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Xylene, mixed isomers	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Ethylbenzene	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Heavy Aliphatic Solvent	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Light Aromatic Hydrocarbons	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Result
Xylene, mixed isomers	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Ethylbenzene	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Heavy Aliphatic Solvent	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS)) - Category 1

### Aspiration hazard

Product/ingredient name	Result
Xylene, mixed isomers	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1
Heavy Aliphatic Solvent	ASPIRATION HAZARD - Category 1
Light Aromatic Hydrocarbons	ASPIRATION HAZARD - Category 1

### Information on the likely routes of exposure

Not available.

### Potential acute health effects

<b>Eye contact</b>	: Causes serious eye damage.
<b>Inhalation</b>	: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

# Section 11. Toxicological information

- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : Can cause central nervous system (CNS) depression.

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

- Eye contact** : Adverse symptoms may include the following:
  - pain
  - watering
  - redness
- Inhalation** : Adverse symptoms may include the following:
  - nausea or vomiting
  - headache
  - drowsiness/fatigue
  - dizziness/vertigo
  - unconsciousness
- Skin contact** : Adverse symptoms may include the following:
  - pain or irritation
  - redness
  - blistering may occur
- Ingestion** : Adverse symptoms may include the following:
  - stomach pains

## Delayed and immediate effects and also chronic effects from short and long term exposure

### **Short term exposure**

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

### **Long term exposure**

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

## Potential chronic health effects

Not available.

**Conclusion/Summary [Product]** : 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 of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

## Numerical measures of toxicity

### **Acute toxicity estimates**

## Section 11. Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
KRYSTAL® High Solids Conversion Varnish	17155.8	27759.4	N/A	282.7	N/A
n-Butyl Acetate	10768	N/A	N/A	N/A	N/A
Ethanol	7000	N/A	N/A	124.7	N/A
1-Butanol	2500	3400	N/A	24	N/A
Methyl n-Amyl Ketone	1600	N/A	N/A	11	N/A
1-Methoxy-2-propanol	6600	13000	N/A	N/A	N/A
Ethyl Acetate	5620	N/A	N/A	N/A	N/A
2-Methyl-1-propanol	2460	3400	N/A	N/A	N/A
Xylene, mixed isomers	4300	2500	N/A	N/A	N/A
Dimethyl Carbonate	13000	N/A	N/A	N/A	N/A
Ethylbenzene	3500	N/A	N/A	11	N/A
Light Aromatic Hydrocarbons	8400	N/A	N/A	N/A	N/A

## Section 12. Ecological information

### Toxicity

#### Product/ingredient name

#### Result

n-Butyl Acetate

#### Acute - LC50 - Fresh water

Fish - Fathead minnow - *Pimephales promelas*  
Age: 31 to 32 days; Size: 21.6 mm; Weight: 0.175 g  
 18 mg/l [96 hours]  
Effect: Mortality

#### Acute - LC50 - Marine water

Crustaceans - Brine shrimp - *Artemia salina*  
 32 mg/l [48 hours]  
Effect: Mortality

Ethanol

#### Acute - LC50 - Fresh water

Fish - Rainbow trout, donaldson trout - *Oncorhynchus mykiss*  
 42 mg/l [4 days]  
Effect: Mortality

#### Acute - EC50 - Marine water

Algae - Green algae - *Ulva pertusa*  
 17.921 mg/l [96 hours]  
Effect: Reproduction

#### Chronic - NOEC - Marine water

Algae - Green algae - *Ulva pertusa*  
 4.995 mg/l [96 hours]  
Effect: Reproduction

#### Chronic - NOEC - Fresh water

Daphnia - Water flea - *Daphnia magna* - Neonate  
Age: <24 hours  
 100 µl/l [21 days]  
Effect: Mortality

#### Chronic - NOEC - Fresh water

Fish - Eastern mosquitofish - *Gambusia holbrooki* - Larvae  
Age: 3 days  
 0.375 µl/l [12 weeks]  
Effect: Morphology

#### Acute - EC50 - Fresh water

Daphnia - Water flea - *Daphnia magna*  
 2 mg/l [48 hours]

## Section 12. Ecological information

1-Butanol	<p><u>Effect</u>: Intoxication <b>Acute - LC50 - Fresh water</b> Fish - Fathead minnow - <i>Pimephales promelas</i> <u>Age</u>: 33 days; <u>Size</u>: 20.6 mm; <u>Weight</u>: 0.119 g 1730 mg/l [96 hours] <u>Effect</u>: Mortality <b>Acute - EC50 - Fresh water</b> Daphnia - Water flea - <i>Daphnia magna</i> <u>Age</u>: 6 to 24 hours 1983 mg/l [48 hours] <u>Effect</u>: Intoxication</p>
Methyl n-Amyl Ketone	<p><b>Acute - LC50 - Fresh water</b> Fish - Fathead minnow - <i>Pimephales promelas</i> <u>Age</u>: 32 days; <u>Size</u>: 18.4 mm; <u>Weight</u>: 0.095 g 131 mg/l [96 hours] <u>Effect</u>: Mortality</p>
Ethyl Acetate	<p><b>Acute - LC50 - Fresh water</b> Daphnia - Water flea - <i>Daphnia cucullata</i> <u>Age</u>: 11 days 154 mg/l [48 hours] <u>Effect</u>: Mortality <b>Acute - LC50 - Fresh water</b> Fish - Indian catfish - <i>Heteropneustes fossilis</i> <u>Size</u>: 14.16 cm; <u>Weight</u>: 25.54 g 212.5 mg/l [96 hours] <u>Effect</u>: Mortality <b>Acute - EC50 - Fresh water</b> Algae - Green algae - <i>Selenastrum sp.</i> 2500 mg/l [96 hours] <u>Effect</u>: Population <b>Chronic - NOEC - Fresh water</b> Fish - Fathead minnow - <i>Pimephales promelas</i> - Embryo <u>Age</u>: &lt;24 hours 75.6 mg/l [32 days] <u>Effect</u>: Mortality <b>Chronic - NOEC - Fresh water</b> Daphnia - Water flea - <i>Daphnia magna</i> <u>Age</u>: ≤24 hours 2.4 mg/l [21 days] <u>Effect</u>: Mortality</p>
2-Methyl-1-propanol	<p><b>Acute - LC50 - Fresh water</b> Fish - Rainbow trout, donaldson trout - <i>Oncorhynchus mykiss</i> <u>Weight</u>: 1.67 g 1330 mg/l [96 hours] <u>Effect</u>: Mortality <b>Acute - LC50 - Marine water</b> Crustaceans - Brine shrimp - <i>Artemia salina</i> 600 mg/l [48 hours] <u>Effect</u>: Mortality <b>Chronic - NOEC - Fresh water</b> Daphnia - Water flea - <i>Daphnia magna</i> <u>Age</u>: ≤24 hours 4 mg/l [21 days] <u>Effect</u>: Reproduction</p>
Xylene, mixed isomers	<p><b>Acute - LC50 - Marine water</b> Crustaceans - Daggerblade grass shrimp - <i>Palaemon pugio</i> 8500 µg/l [48 hours]</p>

# Section 12. Ecological information

Effect: Mortality  
**Acute - LC50 - Fresh water**  
 Fish - Fathead minnow - *Pimephales promelas*  
Age: 31 days; Size: 18.4 mm; Weight: 0.077 g  
 13.4 mg/l [96 hours]  
Effect: Mortality  
**Acute - EC50 - Fresh water**  
 Algae - Green algae - *Raphidocelis subcapitata*  
 579 mg/l [96 hours]  
Effect: Biochemistry  
**Acute - LC50 - Fresh water**  
 Fish - Rainbow trout, donaldson trout - *Oncorhynchus mykiss*  
 4200 µg/l [96 hours]  
Effect: Mortality  
**Acute - EC50 - Fresh water**  
 Daphnia - Water flea - *Daphnia magna* - Neonate  
Age: ≤24 hours  
 2.93 mg/l [48 hours]  
Effect: Intoxication  
**Acute - EC50 - Fresh water**  
 Algae - Green algae - *Raphidocelis subcapitata*  
 3600 µg/l [96 hours]  
Effect: Population

Cellulose Nitrate

Ethylbenzene

**Conclusion/Summary [Product]** : Not available.

**Persistence and degradability**

Product/ingredient name	Result
Isobutylated Urea-Formaldehyde Polymer	OECD 7% [28 days]

**Conclusion/Summary [Product]** : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-Butyl Acetate	-	-	Readily
Ethanol	-	-	Readily
1-Butanol	-	-	Readily
Isobutylated Urea-Formaldehyde Polymer	-	-	Not readily
Methyl n-Amyl Ketone	-	-	Readily
Ethyl Acetate	-	-	Readily
2-Methyl-1-propanol	-	-	Readily
Xylene, mixed isomers	-	-	Readily
Ethylbenzene	-	-	Readily
Light Aromatic Hydrocarbons	-	-	Readily

**Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Ethyl Acetate	-	30	Low
Xylene, mixed isomers	-	8.1 to 25.9	Low
Heavy Aliphatic Solvent	-	10 to 2500	High
Light Aromatic Hydrocarbons	-	10 to 2500	High

## Section 12. Ecological information

### Mobility in soil

Soil/Water partition coefficient : Not available.






### Other adverse effects

No known significant effects or critical hazards.

## 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.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
<b>UN number</b>	UN1263	UN1263	UN1263	UN1263	UN1263
<b>UN proper shipping name</b>	PAINT	PAINT	PAINT	PAINT	PAINT
<b>Transport hazard class(es)</b>	3 	3 	3 	3 	3 
<b>Packing group</b>	II	II	II	II	II
<b>Environmental hazards</b>	No.	No.	No.	No.	No.
<b>Additional information</b>	-  <b>ERG No.</b> 128	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).  <b>ERG No.</b> 128	-  <b>ERG No.</b> 128	-	<b>Emergency schedules</b> F-E, S-E

## Section 14. Transport information

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**Special precautions for user** : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according to IMO instruments** : Not available.

**Proper shipping name** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** :

### SARA 313

All data given below are MAXIMUM THEORETICAL VALUES based on the product AS CURRENTLY FORMULATED and rely on information provided to us by our raw material suppliers. Our suppliers often provide an estimated value or range less than a certain upper limit. We calculate MAXIMUM THEORETICAL VALUES using defined values, if provided, or the upper limit reported by our supplier. Additionally, the suppliers' information may include amounts present in the product as unintentional byproducts or impurities. Variations may occur in individual batches due to adjustments made during production. Reporting of chemicals in this section does not necessarily indicate their presence in the final formulated product.

<b>Ingredient name</b>	<b>% by weight</b>	<b>CAS number</b>
Ethylbenzene	0.3	100-41-4
1-Butanol	5	71-36-3
Xylene, mixed isomers	2	1330-20-7

### California Prop. 65

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

### International regulations

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

### **International lists**

: **Australia inventory (AIIIC)**: Not determined.  
**China inventory (IECSC)**: Not determined.  
**Japan inventory (CSCL)**: Not determined.  
**Japan inventory (ISHL)**: Not determined.  
**Korea inventory (KECI)**: Not determined.  
**New Zealand Inventory of Chemicals (NZIoC)**: Not determined.  
**Philippines inventory (PICCS)**: Not determined.  
**Taiwan Chemical Substances Inventory (TCSI)**: Not determined.  
**Thailand inventory**: Not determined.  
**Turkey inventory**: Not determined.  
**Vietnam inventory**: Not determined.

<b>Date of issue/Date of revision</b> : 5/2/2026	<b>Date of previous issue</b> : 10/11/2025	<b>Version</b> : 29	23/25
C14512	KRYSTAL® High Solids Conversion Varnish Dull	<b>SHW-85-NA-GHS-US</b>	

# Section 16. Other information

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

Health	*	3
Flammability		3
Physical hazards		0

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

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

### Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 2	On basis of test data
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	Calculation method
CARCINOGENICITY - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method

### History

- Date of printing** : 5/2/2026
- Date of issue/Date of revision** : 5/2/2026
- Date of previous issue** : 10/11/2025
- Version** : 29
- Key to abbreviations** : ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
N/A = Not available  
SGG = Segregation Group  
UN = United Nations

📌 Indicates information that has changed from previously issued version.

### Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is

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## Section 16. Other information

responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.