HAZARDS IDENTIFICATION  (ANSI Section 3)

Primary route(s) of exposure: Inhalation, skin contact, eye contact, ingestion.

Effects of overexposure:

Inhalation: Irritation of respiratory tract. Prolonged inhalation may lead to mucous membrane irritation, fatigue, drowsiness, dizziness and/or lightheadedness, headache, nausea, vomiting, diarrhea, central nervous system depression, difficulty of breathing, blood abnormalities, tremors, liver damage, kidney damage.

Skin contact: Irritation of skin. Prolonged or repeated contact can cause dermatitis, defatting.

Possible sensitization to skin. Skin contact may result in dermal absorption of component(s) of this product which may cause fatigue, drowsiness, dizziness and/or lightheadedness, headache, nausea, vomiting, diarrhea, severe abdominal pain, apathy, central nervous system depression, respiratory problems, intoxication, liver damage, kidney damage, pulmonary edema, loss of consciousness, acute poisoning, respiratory failure, cardiac failure, brain damage.

Medical conditions aggravated by exposure: Eye, skin, respiratory disorders, kidney disorders.

FIRST-AID MEASURES  (ANSI Section 4)

Inhalation: Remove to fresh air. Restore and support continued breathing. Get emergency medical attention. Have trained person give oxygen if necessary. Get medical help for any breathing difficulty.

Skin contact: Wash thoroughly with soap and water. If any product remains, gently rub petroleum jelly, vegetable or mineral/baby oil onto skin. Repeated applications may be needed. Remove contaminated clothing. Wash contaminated clothing before re-use.

Eye contact: Flush immediately with large amounts of water, especially under lids for at least 15 minutes. If irritation or other effects persist, obtain medical treatment.

Ingestion: If swallowed, obtain medical treatment immediately.

FIRE-FIGHTING MEASURES  (ANSI Section 5)

Fire extinguishing media: Dry chemical or foam water fog. Carbon dioxide. Vapors are heavier than air and may travel long distances to a source of ignition and flash back. Vapors can form explosive mixtures in air at elevated temperatures. Closed containers may burst if exposed to extreme heat or fire. May decompose under fire conditions emitting irritant and/or toxic gases. Rags, steel wool or waste soaked with this material can spontaneously catch fire if improperly discarded. Immediately after use, place soaked rags, steel wool or waste in a sealed water-filled metal container.

Fire fighting procedures: Water may be used to cool and protect exposed containers. Firefighters should use full protective clothing, eye protection, and self-contained breathing apparatus.

Hazardous decomposition or combustion products: Carbon monoxide, carbon dioxide.

ACCIDENTAL RELEASE MEASURES  (ANSI Section 6)

Steps to be taken in case material is released or spilled: Comply with all applicable health and environmental regulations. Eliminate all sources of ignition. Ventilate area. Spills may be collected with absorbent materials. Complete personal protective equipment must be used during cleanup. Large spills - shut off leak if safe to do so. Dike and contain spill. Pump to storage or salvage vessels. Use absorbent to pick up excess residue. Keep salvageable material and rinse water out of sewers and water courses. Small spills - use absorbent to pick up residue and dispose of properly.

HANDLING AND STORAGE  (ANSI Section 7)

Handling and storage: Store below 100°F (38°C). Keep away from heat, sparks and open flame. Keep from freezing.

Other precautions: Use only with adequate ventilation. Do not take internally. Keep out of reach of children. Avoid contact with skin and eyes, and breathing of vapors. Wash hands thoroughly after handling, especially before eating or smoking. Keep containers tightly closed and upright when not in use. Ground equipment when transferring to prevent accumulation of static charge. Avoid spontaneous combustion of contaminated rags and other easily ignitable organic accumulations.

EXPOSURE CONTROLS/PERSONAL PROTECTION  (ANSI Section 8)

Respiratory protection: Control environmental concentrations below applicable exposure standards when using this material. When respiratory protection is determined to be necessary, use a NIOSH/MSHA (Canadian z94.4) Approved elastomeric sealing-surface facepiece respirator outfitted with organic vapor cartridge and paint spray (dust/mist) prefilter. Determine the proper level of protection by conducting appropriate air monitoring. Consult 29CFR1910.134 For selection of respirators (Canadian z94.4).

Ventilation: Provide dilution ventilation or local exhaust to prevent build-up of vapors.

Personal protective equipment: Eye wash, safety shower, safety glasses or goggles. Impervious gloves, impervious clothing.

STABILITY AND REACTIVITY  (ANSI Section 10)

Under normal conditions: Stable see section 5 fire fighting measures

Materials to avoid: Oxidizers, reducing agents, halogens, caustics.

Conditions to avoid: Elevated temperatures, contact with oxidizing agent, freezing, sparks, open flame, ignition sources.

Hazardous polymerization: Will not occur

TOXICOLOGICAL INFORMATION  (ANSI Section 11)

Supplemental health information: Contains a chemical that is toxic by ingestion. Contains a chemical that is toxic by inhalation. Contains a chemical that may be absorbed through skin. Notice - reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Contains iron oxide, repeated or prolonged exposure to iron oxide dust may cause siderosis, a benign pneumoconiosis. Other effects of overexposure may include toxicity to liver, kidney, central nervous system, blood.

Carcinogenicity: Contains formaldehyde, a potential cancer hazard. Metals exposed to formaldehyde via inhalation developed cancer of the nasal cavity. Evidence in humans is limited (nasal and nasopharyngeal cancer). Formaldehyde is listed as a carcinogen by OSHA, probable human carcinogen (group 2a) by IARC, and a known human carcinogen by NTP. Overexposure can cause eye, skin, and respiratory tract irritation, and skin and respiratory sensitization. In a 2-year inhalation bioassay conducted by the national toxicology program (NTP), ethylene glycol butyl ether (ebge) caused an increased incidence of liver tumors in male mice and forestomach tumors in female mice exposed to 250 ppm, the highest concentration tested with mice. In rats, an increased incidence of tumors affecting the adrenal gland was seen in females exposed at 125 ppm only. This finding was not statistically significant. No increased incidence of any tumor type was seen in male rats exposed to the highest test concentration of 125 ppm. The relevance of these findings to humans is unclear.

Reproductive effects: No reproductive effects are anticipated

Mutagenicity: No mutagenic effects are anticipated

The information contained herein is based on data available at the time of preparation of this data sheet which Akzo Nobel Paints believes to be reliable. However, no warranty is expressed or implied regarding the accuracy of this data. Akzo Nobel Paints shall not be responsible for the use of this information, or of any product, method or apparatus mentioned and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and the health and safety of your employees and the users of this material. Complies with OSHA hazard communication standard 29CFR1910.1200.
**Teratogenicity**

Some laboratory test results have shown ethylene glycol to be an animal teratogen. However, an expert panel convened by the national toxicology program’s center for the evaluation of risks to human reproduction (cerhr) conducted a review of the scientific literature and concluded that ethylene glycol does not present a significant concern with respect to developmental and reproductive toxicity in humans.

**ECOLOGICAL INFORMATION**

(ANSI Section 12)

No ecological testing has been done by akzo nobel paints llc on this product as a whole.

**Physical Data**

(ANSI Sections 1, 9, and 14)

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Wt. / Gal.</th>
<th>VOC gr. / ltr.</th>
<th>% Volatile by Volume</th>
<th>Flash Point</th>
<th>Boiling Range</th>
<th>HMIS</th>
<th>DOT, proper shipping name</th>
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<tbody>
<tr>
<td>FLD380</td>
<td>cwf-hardwoods natural tone 275voc</td>
<td>8.48</td>
<td>263.15</td>
<td>90.87</td>
<td>none</td>
<td>140-400</td>
<td>*310</td>
<td>paint<strong>protect from freezing</strong></td>
</tr>
<tr>
<td>FLD381</td>
<td>cwf-hardwoods cedar tone 275voc</td>
<td>8.48</td>
<td>263.27</td>
<td>90.61</td>
<td>none</td>
<td>140-400</td>
<td>*310</td>
<td>paint<strong>protect from freezing</strong></td>
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</tbody>
</table>

**Ingredients**

Product Codes with % by Weight (ANSI Section 2)

<table>
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<tr>
<th>Chemical Name</th>
<th>Common Name</th>
<th>CAS. No.</th>
<th>FLD380</th>
<th>FLD381</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-ethanediol</td>
<td>ethylene glycol</td>
<td>107-21-1</td>
<td>1-5</td>
<td>1-5</td>
</tr>
<tr>
<td>ethanol, 2-butoxy-</td>
<td>2-butoxyethanol</td>
<td>111-76-2</td>
<td>1-5</td>
<td>1-5</td>
</tr>
<tr>
<td>formaldehyde</td>
<td>formaldehyde</td>
<td>50-00-0</td>
<td>LT .01</td>
<td>LT .01</td>
</tr>
<tr>
<td>c.i. pigment yellow 42</td>
<td>yellow iron oxide</td>
<td>51274-00-1</td>
<td>1-5</td>
<td>1-5</td>
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<tr>
<td>water</td>
<td>water</td>
<td>7732-18-5</td>
<td>80-90</td>
<td>80-90</td>
</tr>
<tr>
<td>acrylate modified alkyd resin</td>
<td>acrylate modified alkyd resin</td>
<td>Sup. Conf.</td>
<td>5-10</td>
<td>5-10</td>
</tr>
</tbody>
</table>

**Chemical Hazard Data**

(ANSI Sections 2, 8, 11, and 15)

| Common Name | CAS. No. | 8-Hour TWA | STEL | C | S | 8-Hour TWA | STEL | C | S | S.R. Std. | S2 | S3 | CC | H | M | N | I | O |
|-------------|----------|-------------|------|---|---|-------------|------|---|---|-----------|----|----|----|---|---|---|---|---|---|---|
| ethylene glycol | 107-21-1 | not est. | not est. | 100 mg/m3 | not est. | not est. | not est. | not est. | not est. | not est. | n | y | y | n | n | n | n |
| 2-butoxyethanol | 111-76-2 | 20 ppm | not est. | not est. | not est. | 50 ppm | not est. | not est. | y | not est. | n | y | n | n | n | n | n |
| formaldehyde | 50-00-0 | not est. | not est. | 0.3 ppm | not est. | 0.75 ppm | 2 ppm | not est. | not est. | not est. | y | y | y | n | y | y | y |
| yellow iron oxide | 51274-00-1 | 5 mg/m3 | not est. | not est. | not est. | 10 mg/m3 | not est. | not est. | not est. | not est. | n | n | n | n | n | n | n |
| acrylate modified alkyd resin | Sup. Conf. | not est. | not est. | not est. | not est. | not est. | not est. | not est. | not est. | not est. | n | n | n | n | n | n | n |

**Footnotes:**

- S=Skin - Additional exposure, n/a=not applicable, ppm=parts per million, mg/m3=milligrams per cubic meter
- C=Ceiling - Concentration that should not be exceeded, over and above airborne exposure, not est=not established
- CC=CERCLA Chemical, Sup Conf=Supplier Confidential
- H=Hazardous Air Pollutant, M=Marine Pollutant
- P=Pollutant, S=Severe Pollutant
- N=NTP, I=IARC, O=OSHA, y=yes, n=no

**DISPOSAL CONSIDERATIONS**

(ANSI Section 13)

Waste disposal: Dispose in accordance with all applicable regulations. Avoid discharge to natural waters.

**REGULATORY INFORMATION**

(ANSI Section 15)

As of the date of this MSDS, all of the components in this product are listed (or are otherwise exempt from listing) on the TSCA inventory. This product has been classified in accordance with the hazard criteria of the CPR (controlled products regulations) and the MSDS contains all the information required by the CPR.