MATERIAL SAFETY DATA SHEET

Manufacturer's Name: GAMBLIN ARTISTS COLORS CO.
PO Box 625
Portland, OR 97207

Product: Cadmium Red Light, Cadmium Red Medium, Cadmium Red Deep, Cadmium Orange, Cadmium Orange Deep Artists' Oil Colors

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SECTION 1 -- PRODUCT IDENTITY
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Date prepared: 8/15/99 Emergency telephone no. 503/235-1945

Preparer's Name: R. Gamblin             HMIS Information
Health              2
Chemical name: Vegetable oil/pigment mixture Flammability 1
Reactivity          0
Chemical formula: N/A (mixture)
DOT shipping class: Compound paint, N.O.S., Not regulated by DOT as a hazardous material.

SECTION II -- HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS#</th>
<th>Wt%</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium sulfide</td>
<td>1306-23-6</td>
<td>59-97</td>
<td>5/mg/m3</td>
<td>10/2 mg/m3 (as Cd)</td>
</tr>
<tr>
<td>Cadmium selenide</td>
<td>1306-24-7</td>
<td>3-55</td>
<td>5 mg/m3</td>
<td>10/2 mg/m3 (as Se)</td>
</tr>
<tr>
<td>Barium Sulfate</td>
<td>7727-43-7</td>
<td>0-40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc Sulfide(PNOC)</td>
<td>1314-98-3</td>
<td>0-5</td>
<td>15/5mg/m3</td>
<td>10mg/m3</td>
</tr>
</tbody>
</table>

These are reportable chemicals under 40 CFR 372. SARA Title III Section 313

Hazards Identification

Ingestion: Not toxic for acute exposure to animals.
Chronic Effects/Carcinogenicity:
OSHA has chosen to regulate occupational exposure to all cadmium compounds, including pigments, as a single category. The standard states that substances containing cadmium are a cancer hazard and can cause lung and kidney disease.

Cadmium and cadmium compounds are listed in the Annual NTP Report as carcinogenic to animals, but with only limited evidence of carcinogenicity to humans. This information is based on test results for cadmium compounds other than pigmentary forms.

Although certain cadmium compounds are known to cause kidney damage in humans and has been shown to cause lung cancer in laboratory animals, no chronic health effects have been shown to result from exposure to cadmium pigments. Cadmium pigments have been shown to be significantly less biologically available and less active than other cadmium compounds.

SECTION III -- PHYSICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling range</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1 - 1.4</td>
</tr>
<tr>
<td>% volatile (volume)</td>
<td>0</td>
</tr>
<tr>
<td>Evaporation rate (BuOAc = 1):</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility (specify solvents):</td>
<td>Insoluble in water. Soluble in most petroleum solvents.</td>
</tr>
<tr>
<td>Appearance and odor</td>
<td>Red paste, linseed oil odor.</td>
</tr>
</tbody>
</table>

SECTION IV -- FIRE & EXPLOSION DATA

Flash point: 650 degree F
Extinguishing media: CO2, dry chemical, water fog
Special firefighting procedures: water or foam may cause frothing if directed into container of burning material. Use water to cool containers exposed to heat.

Unusual fire & explosion hazards: contaminated rags or other easily ignited organic materials are spontaneously combustible. Immerse in

http://www.gamblincolors.com/msds/cadredorago.html (2 of 4)
Material Safety Data Sheet for Cadmium Red Light, Cadmium Red Medium, Cadmium Red Deep, Cadmium Orange, Cadmium Orange Deep Artists' Oil Colors

Reactivity: product is stable
Hazardous polymerization: will not occur
Conditions to avoid: avoid extreme heat

Hazardous decomposition products:
Usual products of combustion: CO, CO2 and possibly acrolein.

SECTION V -- HEALTH HAZARD DATA

Route(s) of entry: Eye contact, ingestion of paint
Acute health effects: Eye contact may cause redness or irritation
Inhalation: N/A
Ingestion: No known adverse health effects
Skin contact: No known adverse health effects

EMERGENCY FIRST AID PROCEDURES:
Eye contact: wash with clean water for at least fifteen minutes. If irritation persists, get medical attention.
Inhalation: N/A
Skin contact: N/A

CHRONIC HEALTH EFFECTS:
Cadmium and certain cadmium compounds are listed in IARC and the Annual NTP Report as carcinogenic, but with only limited evidence of carcinogenicity to humans. These listings are based on test results for cadmium compounds other than the pigmentary forms.
No known adverse health affects to linseed oil.
No known medical conditions aggravated by exposure to cadmium oil paints.

SECTION VI -- SPILL OR LEAK PROCEDURE

Steps to be taken in case material is spilled: remove all sources of ignition.
Soak up spill with absorbent materials.
Waste disposal method:  Rags and absorbent materials should be
immersed in water.
Small amounts can be dried and disposed of as ordinary trash.

SECTION VII - SPECIAL PROTECTION DATA

Respiratory protection:  none normally required
Ventilation:  none normally required
Protective gloves:  use of gloves is suggested when prolonged or
repeated contact with hands
is likely.  Individuals having sensitive skin may find it beneficial
to use a barrier cream
or moisturizer when excessive or prolonged contact with skin is
likely.
Eye protection:  safety glasses if eye contact is likely; eyewash
fountain should be accessible.

SECTION III -- STORAGE & HANDLING DATA

Precautions to be taken in handling and storage:  store away from
high temperature, sparks or open flame.  Read and observe all
precautions on product label.
Other precautions:  wash hands after use.  Immerse contaminated rags
in water.

The information contained herein is based on the data available to
use and is believe to be correct.  However, Gamblin Artists Colors
Co. makes no warranty, expressed or implied, regarding the accuracy
of these data or the results to be obtained from the use thereof.
Gamblin assumes no responsibility for injury from the use of the
product described herein.