1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information

<table>
<thead>
<tr>
<th>Trade name</th>
<th>888-0836 COlORTREND®ORGANIC RED R</th>
</tr>
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<tbody>
<tr>
<td>Use of the Substance /</td>
<td>Aqueous colorant</td>
</tr>
<tr>
<td>Preparation</td>
<td></td>
</tr>
<tr>
<td>Supplier</td>
<td>Chromaflo Technologies Corporation</td>
</tr>
<tr>
<td></td>
<td>2600 Michigan Avenue</td>
</tr>
<tr>
<td></td>
<td>Ashtabula,OH 44005-0816 USA</td>
</tr>
<tr>
<td>Telephone</td>
<td>440-997-5137</td>
</tr>
<tr>
<td>Telefax</td>
<td>440-992-3613</td>
</tr>
</tbody>
</table>

CANADA: CANUTEc
EMERGENCY NUMBER

| Product Regulatory Services | 440-536-9691 |
|                            |             |
| MSDS prepared by           | Regulatory Affairs Department     |
|                            | (905) 451-3810 EXT 128             |
|                            | Date prepared: 01/15/2013           |

2. HAZARDS IDENTIFICATION

*** EMERGENCY OVERVIEW ***

Form: paste  Colour: red  Odour: Glycol odor.

COLORTREND colorants may cause eye, skin and respiratory tract irritation. May be harmful if swallowed.

POTENTIAL HEALTH EFFECTS

Eye contact
According to test results on COLORTREND base mixtures, this product is classified as a moderate eye irritant. May cause tearing, reddening and/or swelling.

Skin Contact
COLORTREND colorants may cause irritation. Prolonged or repeated contact may result in defatting and drying of the skin causing skin irritation and dermatitis (rash).

Inhalation
COLORTREND colorants may cause irritation. Overexposure to aerosols or mists containing ethylene glycol may cause lung irritation. See exposure limit (section 8).

Ingestion
May be harmful if swallowed. Ingestion of ethylene glycol may cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, irritability and central nervous system effects. Swallowing large volumes of ethylene glycol causes severe kidney damage and cardiopulmonary effects (metabolic acidosis) which may be fatal. The human oral lethal dose is approximately 1.6 g/kg. Ingestion of excessive amounts of diethylene glycol causes abdominal discomfort or pain, nausea, vomiting, dizziness, central nervous system effects, kidney damage and cardiopulmonary effects (metabolic acidosis) which may be fatal (estimated human oral lethal dose, 1.0 to 1.2 g/kg) and may cause liver effects. Ingestion of ethylene glycol can cause neurological impairment. Repeated ingestion of ethylene glycol can cause bone marrow, liver, and sperm effects.

**Chronic Health Hazard**

Ethylene glycol may aggravate an existing kidney disease. Repeated skin contact with ethylene glycol may, in a very small proportion of cases, cause sensitization with the development of allergic contact dermatitis. The incidence is significantly less than 1% with the undiluted material. Repeated inhalation of ethylene glycol mist may produce signs of central nervous system involvement, particularly dizziness and drowsiness. Short term exposures to talc may cause lung irritation. Long term excessive exposure to talc dust may cause talcosis, a pulmonary fibrosis which in turn may lead to severe and permanent damage to the lungs. NTP Toxicology and Carcinogenesis Studies of Talc revealed that there is some evidence of carcinogenic activity in male rats and clear evidence of carcinogenic activity in female rats. There was no evidence of carcinogenic activity in male or female mice. Because this product is a free-flowing liquid or paste, dust inhalation is not an expected route of exposure.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Information on ingredients / Hazardous components**

- **Talc, Magnesium silicate hydrate**
  - CAS-No. 14807-96-6
  - Percent (Wt./ Wt.) >= 30 - < 60 %

- **Ethanediol; ethylene glycol**
  - CAS-No. 107-21-1
  - Percent (Wt./ Wt.) >= 10 - < 30 %

- **Diethylene glycol**
  - CAS-No. 111-46-6
  - Percent (Wt./ Wt.) >= 3 - < 7 %

- **Dodecylphenoxypoly(ethyleneoxy)ethylene**
  - CAS-No. 9014-92-0
  - Percent (Wt./ Wt.) >= 1 - < 5 %

- **Polyoxyethylated oleyl amine**
  - CAS-No. 58253-49-9
  - Percent (Wt./ Wt.) >= 1 - < 5 %

- **Iron oxide**
  - CAS-No. 1332-37-2
  - Percent (Wt./ Wt.) >= 1 - <= 5 %

**Other information**

This material is classified as hazardous under OSHA regulations.
4. FIRST AID MEASURES

**Inhalation**
If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If unconscious, evaluate the need for artificial respiration. Get immediate medical attention.

**Skin contact**
Wash contaminated area with lukewarm gently flowing water for at least 20-30 minutes. Remove contaminated clothing, shoes and leather goods under running water. If symptoms develop or persist, obtain medical attention. Wash clothing before reuse.

**Eye contact**
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not allow contaminated water to contact the unaffected eye or face during irrigation of an affected eye. Seek medical advice immediately.

**Ingestion**
Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention. If the heart has stopped or breathing has stopped, trained personnel should begin cardiopulmonary resuscitation or artificial respiration immediately. Never administer anything by mouth to an individual who rapidly losing consciousness, unconscious or convulsing.

5. FIRE-FIGHTING MEASURES

**Flash point**
not determined
Method: No information available.

**Lower explosion limit**
not determined

**Upper explosion limit**
not determined

**Autoignition temperature**
not determined

**Suitable extinguishing media**
In case of fire, use water (flood with water), dry chemical, CO2 or "alcohol" foam.

**Specific hazards during fire fighting**
Contains material that can burn in fire if contained water is evaporated by heat or fire. Burning will produce hazardous compounds including oxides of: carbon. nitrogen. chlorine

**Further information**
As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear. Containers can build up pressure if exposed to heat (fire). Cool with water spray.
6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Wear personal protective equipment; see section 8.

Environmental precautions
Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

Methods for cleaning up
Ventilate area. Absorb spill with inert material and place in a chemical waste container.

7. HANDLING AND STORAGE

Handling
Safe handling advice
Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Avoid breathing vapor or mist. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Wash thoroughly after handling.

Storage
Requirements for storage areas and containers
Keep in a dry, cool place.
Keep container closed when not in use.
Residual vapors might explode on ignition; do not apply heat, cut, drill, grind or weld on or near this container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component occupational exposure guidelines

- Talc, Magnesium silicate hydrate
  CAS-No. 14807-96-6
  Control parameters
  
<table>
<thead>
<tr>
<th>Control parameters</th>
<th>Time Weighted Average</th>
<th>Respirable dust.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 mg/m³</td>
<td>(TWA):(CAD AB OEL)</td>
<td></td>
</tr>
<tr>
<td>4 mg/m³</td>
<td>(TWA):(CAD AB OEL)</td>
<td>Total dust.</td>
</tr>
<tr>
<td>2 mg/m³</td>
<td>(TWA):(CAD BC OEL)</td>
<td>Respirable dust.</td>
</tr>
<tr>
<td>2 mg/m³</td>
<td>(TWA):(CAD BC OEL)</td>
<td>Respirable.</td>
</tr>
<tr>
<td>3 mg/m³</td>
<td>(TWA):(OEL (QUE))</td>
<td>Respirable dust.</td>
</tr>
<tr>
<td>2 mg/m³</td>
<td>(TWA):(CAD SK OEL)</td>
<td>Respirable particles.</td>
</tr>
<tr>
<td>2 mg/m³</td>
<td>8 hour average contamination limit:(CAD SK OEL)</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>2 mg/m³</td>
<td>(TWA):(CAD MB OEL)</td>
<td>The value is for particulate matter</td>
</tr>
</tbody>
</table>
containing no asbestos and <1% crystalline silica.

- **ethanediol; ethylene glycol**
  
  CAS-No. 107-21-1
  
  Control parameters
  
  50 ppm  Ceiling Limit Value: (CAD BC OEL) Vapor.
  
  100 mg/m³ Ceiling Limit Value: (CAD BC OEL) Aerosol.
  
  10 mg/m³ Time Weighted Average (TWA): (CAD BC OEL) Particulate.
  
  20 mg/m³ Short Term Exposure Limit (STEL): (CAD BC OEL) Particulate.
  
  50 ppm Ceiling Limit Value: (OEL (QUE)) Vapor and mist.
  
  127 mg/m³ Ceiling Limit Value: (OEL (QUE)) Vapor and mist. Recirculation prohibited
  
  100 mg/m³ Ceiling Limit Value: (CAD AB OEL) Total dust.
  
  100 mg/m³ Ceiling Limit Value: (CAD SK OEL) Aerosol.
  
  100 mg/m³ Ceiling Limit Value: (CAD MB OEL) Aerosol.
  
  100 mg/m³ Ceiling Limit Value (CEV): (CAD ON OEL) Aerosol.

- **Iron oxide**
  
  CAS-No. 1332-37-2
  
  Control parameters
  
  10 mg/m³ Time Weighted Average (TWA): (OEL (QUE)) Total dust.
  
  10 mg/m³ Time Weighted Average (TWA): (CAD AB OEL) Total dust.
  
  5 mg/m³ Time Weighted Average (TWA): (CAD AB OEL) Respirable dust.
  
  10 mg/m³ Time Weighted Average (TWA): (CAD BC OEL) Total dust.
  
  3 mg/m³ Time Weighted Average (TWA): (CAD BC OEL) Respirable dust.
  
  10 mg/m³ Time Weighted Average (TWA): (CAD BC OEL) Inhalable particulate.
  
  3 mg/m³ Time Weighted Average (TWA): (CAD BC OEL) Respirable particles.

**Engineering measures**

Use only in well-ventilated areas.
Personal protective equipment

Respiratory protection
A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

Hand protection
Use impermeable gloves.

Eye protection
Chemical resistant goggles must be worn.

Skin and body protection
A safety shower and eye wash fountain should be readily available.
To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form  paste
Colour  red
Odour  Glycol odor.

Safety data
pH  8.0 - 9.3
Boiling point/range  > 100 °C
Flash point  Method: No information available. not determined
Autoignition temperature:  not determined
Lower explosion limit  not determined
Upper explosion limit  not determined
Relative density  1.3
Solubility/qualitative  Solubility in water: Dispersible.
Viscosity, dynamic  75 - 90 KU  (25 °C)
Evaporation rate  Slower than butyl acetate

10. STABILITY AND REACTIVITY
Conditions to avoid
Keep away from direct sunlight.
Protect from freezing.

Materials to avoid
strong acids, oxidizing substances
sodium hypochlorite

Further information
Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

Component  Acute oral toxicity  
ethanediol; ethylene glycol  
107-21-1  
LD50 Rat(female):  4000 mg/kg

Diethylene glycol  
111-46-6  
LD50 Rat:  20760 mg/kg

Dodecylphenoxypoly(ethyleneoxy)ethylene  
9014-92-0  
LD50 Rat:  1900 mg/kg

Iron oxide  
1332-37-2  
LD50 Rat:  > 5000 mg/kg

Component  Acute dermal toxicity  
ethanediol; ethylene glycol  
107-21-1  
LD50 Rabbit:  10500 mg/kg

Diethylene glycol  
111-46-6  
LD50 Rabbit:  13300 mg/kg

Dodecylphenoxypoly(ethyleneoxy)ethylene  
9014-92-0  
LD50 Rabbit:  1110 mg/kg

data sheet of the supplier

Component  Repeated dose toxicity  
Talc, Magnesium silicate hydrate  
14807-96-6  
Inhalation Rat(male)  
Testing period:  791 d  
LOAEL:  0.006 mg/l  
target organ/effect:  Lungs

ethanediol; ethylene glycol  
107-21-1  
Chronic ingestion of an ingredient in this product has been shown to cause adverse effects on the peripheral nervous system of laboratory animals.
**Component carcinogenicity assessment**

Talc, Magnesium silicate hydrate 14807-96-6

Short term exposures to talc may cause lung irritation. Long term excessive exposure to talc dust may cause talcosis, a pulmonary fibrosis which in turn may lead to severe and permanent damage to the lungs. NTP Toxicology and Carcinogenesis Studies of Talc revealed that there is some evidence of carcinogenic activity in male rats and clear evidence of carcinogenic activity in female rats. There was no evidence of carcinogenic activity in male or female mice.

**Component teratogenicity assessment**

ethanediol; ethylene glycol 107-21-1

Ethylene glycol has been shown to produce dose-related teratogenic effects in rats and mice when given by gavage or in drinking water at high concentrations or doses. However, there is currently no available information to suggest that ethylene glycol has caused birth defects in humans.

**Component General Toxicity Information**

ethanediol; ethylene glycol 107-21-1

Ethylene glycol may aggravate an existing kidney disease. Repeated skin contact with ethylene glycol may, in a very small proportion of cases, cause sensitization with the development of allergic contact dermatitis. The incidence is significantly less than 1% with the undiluted material. Repeated inhalation of ethylene glycol mist may produce signs of central nervous system involvement, particularly dizziness and drowsiness.

Diethylene glycol 111-46-6

According to long-term animal inhalation studies, very high concentrations of diethylene glycol vapors caused central nervous system effects in mice and rats. However, an extensive review of the literature shows that no such effects have been documented in humans (Patty's Industrial Hygiene and Toxicology, 1982, Third Revised Ed., Vol 2c, p 3838). In a continuous breeding study of mice, continued ingestion of large amounts of diethylene glycol (6 g/kg/day) caused an adverse effect on fertility and some embryotoxic and fetotoxic effects concurrent with some maternal toxicity. The relevance of these very high doses to humans is uncertain.

Dodecylphenoxypoly(ethyleneoxy)ethylene 9014-92-0

An ingredient in this product has been shown to cause developmental toxicity in laboratory animals in the presence of maternal toxicity.

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**12. ECOLOGICAL INFORMATION**

General Ecological Information

No ecotoxicological studies are available.

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**13. DISPOSAL CONSIDERATIONS**
WASTE DISPOSAL

Advice on disposal

Waste must be disposed of in accordance with federal, provincial and local regulations.

14. TRANSPORT INFORMATION

Transport/further information

Not dangerous according to transport regulations.

15. REGULATORY INFORMATION

Canadian Regulations

This MSDS has been prepared in compliance with the Controlled Product Regulations except for use of the 16 headings.

WHMIS Classification

- D2A
- D2B

Chronic toxicity, Teratogen, Moderate skin irritant, Moderate eye irritant

International Chemical Inventory Status

Unless otherwise noted, this product is in compliance with the inventory listing of the countries shown below. For information on listing for countries not shown, please contact Regulatory Affairs Department.

- Europe (EINECS/ELINCS) Listed/registered
- USA (TSCA) Listed/registered
- Canada (DSL) Listed/registered
- Australia (AICS) Listed/registered
- New Zealand Listed/registered

16. OTHER INFORMATION

HMIS Ratings

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
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<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</td>
</tr>
</tbody>
</table>

Further information

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