

**MATERIAL SAFETY DATA SHEET****830-2501 CAL-TINT®II EXTERIOR LIGHT YELLOW**

Material no.		Version	2.2 / US
Specification	139800	Revision date	08/27/2011
Order Number		Print Date	04/06/2013
		Page	1 / 12

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name : 830-2501 CAL-TINT®II EXTERIOR LIGHT YELLOW  
Use of the Substance / : Aqueous colorant  
Preparation  
Company : Chromaflo Technologies Corporation  
2600 Michigan Avenue  
Ashtabula, OH 44005-0816  
USA

Telephone : 440-997-5137

Telefax : 440-992-3613

US: CHEMTREC EMERGENCY : 800-424-9300  
NUMBER

CANADA: CANUTEC : 613-996-6666  
EMERGENCY NUMBER

Product Regulatory Services : 440-536-9691

**2. HAZARDS IDENTIFICATION****\*\*\* EMERGENCY OVERVIEW \*\*\***

*Form-paste    Color-yellow    Odor-Glycol odor.*

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

**POTENTIAL HEALTH EFFECTS****Eye contact**

Severely irritating.  
May cause tearing, reddening and/or swelling.

**Skin Contact**

Moderately irritating.

**Inhalation**

CAL-TINT 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.

**MATERIAL SAFETY DATA SHEET****830-2501 CAL-TINT®II EXTERIOR LIGHT YELLOW**

Material no.		Version	2.2 / US
Specification	139800	Revision date	08/27/2011
Order Number		Print Date	04/06/2013
		Page	2 / 12

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 ethylene glycol can cause neurological impairment.

Repeated ingestion of ethylene glycol can cause bone marrow, liver, and sperm effects.

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.

**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.

In long term dietary studies of tributyl phosphate in rats, urinary bladder tumors, urinary bladder hyperplasia and increased liver weight were noted. Benign liver tumors, liver enlargement and urinary bladder hyperplasia were observed in long term studies in 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**

ethanediol; ethylene glycol			
CAS-No.	107-21-1	Percent (Wt./ Wt.)	10 - 30 %
Talc, Magnesium silicate hydrate			
CAS-No.	14807-96-6	Percent (Wt./ Wt.)	10 - 30 %
Diethylene glycol			
CAS-No.	111-46-6	Percent (Wt./ Wt.)	5 - 10 %
NJT SR No.56705700001-5043P			
CAS-No.	Trade Secret	Percent (Wt./ Wt.)	1 - 5 %
tributyl phosphate			
CAS-No.	126-73-8	Percent (Wt./ Wt.)	1 - 5 %
NJT SR No.56705700001-5704P			
CAS-No.	Trade Secret	Percent (Wt./ Wt.)	1 - 5 %
isopropanol			
CAS-No.	67-63-0	Percent (Wt./ Wt.)	0.1 - 1 %

**Other information**

**MATERIAL SAFETY DATA SHEET****830-2501 CAL-TINT®II EXTERIOR LIGHT YELLOW**

Material no.		Version	2.2 / US
Specification	139800	Revision date	08/27/2011
Order Number		Print Date	04/06/2013
		Page	3 / 12

This material is classified as hazardous under OSHA regulations.

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**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**

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Obtain medical attention. Wash clothing before reuse. Destroy or thoroughly clean contaminated shoes before reuse.

**Eye contact**

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes or until all material has been removed. Obtain medical attention.

**Ingestion**

If swallowed, get medical attention immediately. Only induce vomiting if directed by a physician. Never give anything by mouth to an unconscious person.

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**5. FIRE-FIGHTING MEASURES****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.

**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.

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**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.

**MATERIAL SAFETY DATA SHEET****830-2501 CAL-TINT®II EXTERIOR LIGHT YELLOW**

Material no.		Version	2.2 / US
Specification	139800	Revision date	08/27/2011
Order Number		Print Date	04/06/2013
		Page	4 / 12

**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****• isopropanol**

CAS-No.	67-63-0
Control parameters	400 ppm
	980 mg/m <sup>3</sup>
	400 ppm
	980 mg/m <sup>3</sup>
	500 ppm
	1225 mg/m <sup>3</sup>
	200 ppm
	400 ppm

PEL:(OSHA Z1)

Time Weighted Average (TWA)  
Permissible Exposure Limit (PEL):(US CA OEL)  
Short Term Exposure Limit (STEL):(US CA OEL)  
Time Weighted Average (TWA):(ACGIH)  
Short Term Exposure Limit (STEL):(ACGIH)

**• tributyl phosphate**

CAS-No.	126-73-8
	0.2 ppm
	5 mg/m <sup>3</sup>
	0.2 ppm
	2.5 mg/m <sup>3</sup>

Time Weighted Average (TWA):(ACGIH)  
PEL:(OSHA Z1)  
Time Weighted Average (TWA)  
Permissible Exposure Limit (PEL):(US CA OEL)

**• ethanediol; ethylene glycol**

CAS-No.	107-21-1
	100 mg/m <sup>3</sup>
	Aerosol.
	40 ppm
	100 mg/m <sup>3</sup>
	Vapor.

Ceiling Limit Value:(ACGIH)

Ceiling Limit Value:(US CA OEL)

**• Talc, Magnesium silicate hydrate**

CAS-No.	14807-96-6
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**MATERIAL SAFETY DATA SHEET****830-2501 CAL-TINT®II EXTERIOR LIGHT YELLOW**

Material no.		Version	2.2 / US
Specification	139800	Revision date	08/27/2011
Order Number		Print Date	04/06/2013
		Page	5 / 12

2 mg/m3 Respirable fraction. The value is for particulate matter containing no asbestos and <1% crystalline silica.	Time Weighted Average (TWA):(ACGIH)
2 mg/m3  Respirable dust.	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):(US CA OEL)
20millions of particles per cubic foot of air	Time Weighted Average (TWA):(Z3)
2.4millions of particles per cubic foot of air Respirable. The exposure limit is calculated from the equation, 250/(%SiO2+5), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits.	Time Weighted Average (TWA):(Z3)
0.1 mg/m3 Respirable. The exposure limit is calculated from the equation, 10/(%SiO2+2), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits.	Time Weighted Average (TWA):(Z3)
0.3 mg/m3 Total dust. The exposure limit is calculated from the equation, 30/(%SiO2+2), using a value of 100% SiO2. Lower values of % SiO2 will give higher exposure limits.	Time Weighted Average (TWA):(Z3)

**Other information**

The exposure value for ethylene glycol is given as an aerosol.  
The AIHA WEEL for diethylene glycol is 50 PPM for total vapor and aerosol and 10 mg/m3 for aerosol alone (eight hour time-weighted averages).  
The OSHA TWA and ACGIH TWA exposure values for talc are for asbestos free talc expressed as millions of particles per cubic foot (mppcf).

**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.

# MATERIAL SAFETY DATA SHEET

## 830-2501 CAL-TINT®II EXTERIOR LIGHT YELLOW



Material no.		Version	2.2 / US
Specification	139800	Revision date	08/27/2011
Order Number		Print Date	04/06/2013
		Page	6 / 12

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
Color	yellow
Odor	Glycol odor.

#### Safety data

pH	8.0 - 9.0
Boiling point/range	> 100 °C
Relative density	1.4
Solubility/qualitative	Solubility in water: Dispersible.
Viscosity, dynamic	75 - 95 KU (25 °C)
Solvents and Volatiles Data	% VOC (gm/l) 537
Evaporation rate	Slower than butyl acetate

### 10. STABILITY AND REACTIVITY

Conditions to avoid	Not applicable.
Materials to avoid	strong acids, oxidizing substances sodium hypochlorite

### 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
		NJTSR No.56705700001-5043P Trade Secret LD50 Rat: 3000 mg/kg
		tributyl phosphate

**MATERIAL SAFETY DATA SHEET****830-2501 CAL-TINT®II EXTERIOR LIGHT YELLOW**

Material no.		Version	2.2 / US
Specification	139800	Revision date	08/27/2011
Order Number		Print Date	04/06/2013
		Page	7 / 12

126-73-8  
LD50 Rat: 1390 mg/kg  
(literature value)

NJTSR No.56705700001-5704P  
Trade Secret  
LD50 Rat: 5700 mg/kg

isopropanol  
67-63-0  
LD50 Rat: 4720 mg/kg  
(literature value)

Component Acute inhalation toxicity tributyl phosphate  
126-73-8  
LC50 Rat: 28.0 mg/l / 1 h  
(literature value)

isopropanol  
67-63-0  
LC50 Rat: 41.65 mg/l / 4 h  
Calculated from ppm value  
(literature value)

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

NJTSR No.56705700001-5043P  
Trade Secret  
LD50 Rabbit: 4400 mg/kg

tributyl phosphate  
126-73-8  
LD50 Rabbit: > 10000 mg/kg

isopropanol  
67-63-0  
LD50 Rabbit: 12890 mg/kg  
(calculated)  
(literature value)

Component Skin irritation tributyl phosphate  
126-73-8  
Rabbit / 4 h  
slightly irritating

Component Eye irritation tributyl phosphate  
126-73-8  
Rabbit

**MATERIAL SAFETY DATA SHEET****830-2501 CAL-TINT®II EXTERIOR LIGHT YELLOW**

Material no.		Version	2.2 / US
Specification	139800	Revision date	08/27/2011
Order Number		Print Date	04/06/2013
		Page	8 / 12

slightly irritating

Component Repeated dose toxicity

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.

Talc, Magnesium silicate hydrate  
14807-96-6

Inhalation Rat(male)

Testing period: 791 d

LOAEL: 0.006 mg/l

target organ/effect: Lungs

Component Gentoxicity in vitro

tributyl phosphate  
126-73-8

In vitro tests have shown mutagenic effects.

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.

tributyl phosphate  
126-73-8

Postnatal and fetotoxic effects have been observed in the presence of maternal toxicity with oral administration in rats.

isopropanol  
67-63-0

Oral administration of isopropanol has produced fetotoxic effects in rats at levels that were maternally toxic and developmental effects in levels that were maternally non-toxic. Inhalation exposure to rats has produced developmental effects only at maternally toxic doses and reduced fetal weight at levels that were not maternally toxic.

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



**MATERIAL SAFETY DATA SHEET****830-2501 CAL-TINT®II EXTERIOR LIGHT YELLOW**

Material no.		Version	2.2 / US
Specification	139800	Revision date	08/27/2011
Order Number		Print Date	04/06/2013
		Page	9 / 12

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.

tributyl phosphate  
126-73-8

In long term dietary studies of the alkyl phosphate in rats, urinary bladder tumors, urinary bladder hyperplasia and increased liver weight were noted. Benign liver tumors, liver enlargement and urinary bladder hyperplasia were observed in long term studies in mice.

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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, state, provincial and local regulations. **CONTAINER DISPOSAL:** Empty containers by removing the top and inverting to allow all free-flowing product to drain. To meet regulatory criteria, the container is considered empty when less than 3% remains in the container. Additional special handling is not typically required and the empty container can be discarded with other non-hazardous trash. Note: Local disposal regulations may be more stringent and require additional restrictions or precautions. Customers should check with their local disposal company, municipal or state authority. Recycle of plastic or metal containers may require clean rather than empty containers. In this case the containers can be rinsed with water until the containers are considered generally product free.

**MATERIAL SAFETY DATA SHEET****830-2501 CAL-TINT®II EXTERIOR LIGHT YELLOW**

Material no.		Version	2.2 / US
Specification	139800	Revision date	08/27/2011
Order Number		Print Date	04/06/2013
		Page	10 / 12

**14. TRANSPORT INFORMATION****Transport/further information**

Not dangerous according to transport regulations.

**15. REGULATORY INFORMATION****Information on ingredients / Non-hazardous components**

This product contains the following non-hazardous components

Water			
CAS-No.	7732-18-5	Percent (Wt./ Wt.)	10 - 30 %
NJTSR No.	56705700001-5653P		
CAS-No.	Trade Secret	Percent (Wt./ Wt.)	10 - 30 %
NJTSR No.	56705700001-5578P		
CAS-No.	Trade Secret	Percent (Wt./ Wt.)	5 - 10 %
NJTSR No.	56705700001-5022P		
CAS-No.	Trade Secret	Percent (Wt./ Wt.)	1 - 5 %

**US Federal Regulations****OSHA**

If listed below, chemical specific standards apply to the product or components:

- None listed

**Clean Air Act Section (112)**

If listed below, components present at or above the de minimus level are hazardous air pollutants:

- ethanediol; ethylene glycol  
CAS-No. 107-21-1

**CERCLA Reportable Quantities**

If listed below, a reportable quantity (RQ) applies to the product based on the percent of the named component:

- ethanediol; ethylene glycol  
CAS-No. 107-21-1  
Reportable Quantity 20045 lbs

**SARA Title III Section 311/312 Hazard Categories**

The product meets the criteria only for the listed hazard classes:

- Acute Health Hazard
- Chronic Health Hazard

# MATERIAL SAFETY DATA SHEET

## 830-2501 CAL-TINT®II EXTERIOR LIGHT YELLOW



Material no.		Version	2.2 / US
Specification	139800	Revision date	08/27/2011
Order Number		Print Date	04/06/2013
		Page	11 / 12

### SARA Title III Section 313 Reportable Substances

If listed below, components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

- ethanediol; ethylene glycol  
CAS-No. 107-21-1

### Toxic Substances Control Act (TSCA)

If listed below, non-proprietary substances are subject to export notification under Section 12 (b) of TSCA:

- None listed

### State Regulations

#### California Proposition 65

A warning under the California Drinking Water Act is required only if listed below:

- None listed

### 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, contact the Product Regulatory Services Department.

- |                          |                           |
|--------------------------|---------------------------|
| • Europe (EINECS/ELINCS) | Listed/registered         |
| • USA (TSCA)             | Listed/registered         |
| • Canada (DSL)           | Listed/registered         |
| • Australia (AICS)       | Listed/registered         |
| • Japan (MITI)           | Not listed/Not registered |
| • Korea (TCCL)           | Not listed/Not registered |
| • Philippines (PICCS)    | Listed/registered         |
| • China                  | Listed/registered         |
| • New Zealand            | Listed/registered         |

## 16. OTHER INFORMATION

### HMIS Ratings

Health :	2*
Flammability :	1
Physical Hazard :	0

**MATERIAL SAFETY DATA SHEET****830-2501 CAL-TINT®II EXTERIOR LIGHT YELLOW**

Material no.		Version	<b>2.2 / US</b>
Specification	<b>139800</b>	Revision date	<b>08/27/2011</b>
Order Number		Print Date	<b>04/06/2013</b>
		Page	<b>12 / 12</b>

**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.