

MATERIAL SAFETY DATA SHEET

830-9907 CAL-TINT®II LAMP BLACK



Material no.		Version	2.2 / US
Specification	139644	Revision date	08/31/2011
Order Number		Print Date	04/06/2013
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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information

Trade name : 830-9907 CAL-TINT®II LAMP BLACK
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-black 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 injure eye tissue if not removed promptly.

Skin Contact

Moderately irritating.

Inhalation

May cause respiratory tract irritation.
Overexposure to aerosols or mists containing ethylene glycol may cause lung irritation. See exposure limit (section 8).

Ingestion

May be harmful if swallowed.

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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.

Some studies have linked exposure of carbon black dust to lung effects. IARC classifies carbon black as a Category 2B Carcinogen (known animal carcinogen, possible human carcinogen) based on inhalation studies. However, the manufacturers of carbon black state that epidemiologic studies of workers in the carbon black industry in the U.S. and W. Europe show no significant adverse health effects due to occupational exposure.

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**

Carbon black, amorphous			
CAS-No.	1333-86-4	Percent (Wt./ Wt.)	10 - 30 %
NJT SR No.	56705700001-5043P		
CAS-No.	Trade Secret	Percent (Wt./ Wt.)	5 - 10 %
ethanediol; ethylene glycol			
CAS-No.	107-21-1	Percent (Wt./ Wt.)	10 - 30 %
Diethylene glycol			
CAS-No.	111-46-6	Percent (Wt./ Wt.)	1 - 5 %
Talc, Magnesium silicate hydrate			
CAS-No.	14807-96-6	Percent (Wt./ Wt.)	10 - 30 %
Distillates (petroleum), hydrotreated light; Kerosine - unspecified			
CAS-No.	64742-47-8	Percent (Wt./ Wt.)	0.01 - 1 %
NJT SR No.	56705700001-5704P		
CAS-No.	Trade Secret	Percent (Wt./ Wt.)	1 - 5 %

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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

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

Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get 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.

5. FIRE-FIGHTING MEASURES

Flash point 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.

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.

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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****• Carbon black, amorphous**

CAS-No. 1333-86-4
Control parameters 3.5 mg/m³
3.5 mg/m³

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

3 mg/m³
Inhalable fraction.

• ethanediol; ethylene glycol

CAS-No. 107-21-1
100 mg/m³
Aerosol.

Ceiling Limit Value:(ACGIH)

40 ppm
100 mg/m³
Vapor.

Ceiling Limit Value:(US CA OEL)

• Talc, Magnesium silicate hydrate

CAS-No. 14807-96-6
2 mg/m³
Respirable fraction.

Time Weighted Average (TWA):(ACGIH)

The value is for particulate matter containing no asbestos and <1% crystalline silica.

2 mg/m³

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

Respirable dust.

20millions of particles

Time Weighted Average (TWA):(Z3)

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per cubic foot of air
2.4millions of particles
per cubic foot of air
Respirable.

Time Weighted Average (TWA):(Z3)

The exposure limit is calculated from the equation, $250/(\%SiO_2+5)$, using a value of 100% SiO₂. Lower percentages of SiO₂ will yield higher exposure limits.

0.1 mg/m³
Respirable.

Time Weighted Average (TWA):(Z3)

The exposure limit is calculated from the equation, $10/(\%SiO_2+2)$, using a value of 100% SiO₂. Lower percentages of SiO₂ will yield higher exposure limits.

0.3 mg/m³
Total dust.

Time Weighted Average (TWA):(Z3)

The exposure limit is calculated from the equation, $30/(\%SiO_2+2)$, using a value of 100% SiO₂. Lower values of % SiO₂ will give higher exposure limits.

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.

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	black
Odor	Glycol odor.

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Safety data

pH	8.0 - 9.0
Boiling point/range	> 100 °C
Flash point	not determined
Relative density	1.4
Solubility/qualitative	Solubility in water: Dispersible.
Viscosity, dynamic	75 - 90 KU (25 °C)
Solvents and Volatiles Data	
	% VOC (gm/l) 439
Evaporation rate	Slower than butyl acetate

10. STABILITY AND REACTIVITY

Conditions to avoid	Not applicable.
Materials to avoid	strong acids, oxidizing substances sodium hypochlorite
Further information	Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

Component Acute oral toxicity	Carbon black, amorphous 1333-86-4 LD50 Rat: > 10000 mg/kg NJTSR No.56705700001-5043P Trade Secret LD50 Rat: 3000 mg/kg ethanediol; ethylene glycol 107-21-1 LD50 Rat(female): 4000 mg/kg Diethylene glycol 111-46-6 LD50 Rat: 20760 mg/kg Distillates (petroleum), hydrotreated light; Kerosine - unspecified 64742-47-8 LD50 Rat: > 15000 mg/kg
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NJTSR No.56705700001-5704P

Trade Secret

LD50 Rat: 5700 mg/kg

Component Acute inhalation toxicity

Carbon black, amorphous

1333-86-4

LC50 Rat: 6750 mg/m3 / 4 h

Distillates (petroleum), hydrotreated light; Kerosine - unspecified

64742-47-8

LC50 Rat: > 14100 mg/m3 / 4 h

Component Acute dermal toxicity

NJTSR No.56705700001-5043P

Trade Secret

LD50 Rabbit: 4400 mg/kg

ethanediol; ethylene glycol

107-21-1

LD50 Rabbit: 10500 mg/kg

Diethylene glycol

111-46-6

LD50 Rabbit: 13300 mg/kg

Distillates (petroleum), hydrotreated light; Kerosine - unspecified

64742-47-8

LD50 Rabbit: > 2000 mg/kg

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 Mutagenicity assessment

Carbon black, amorphous

1333-86-4

This product contains one or more ingredients that have been shown to produce mutagenic effects in in vitro testing.

Component carcinogenicity assessment

Carbon black, amorphous

1333-86-4

Some studies have linked exposure of carbon black dust to lung effects. IARC classifies carbon black as a Category 2B Carcinogen (known animal carcinogen, possible human carcinogen) based on inhalation studies. However, the manufacturers of carbon black state that epidemiologic studies of workers in the carbon black industry in the U.S. and W. Europe show no significant adverse health effects due to occupational exposure.

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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.

12. ECOLOGICAL INFORMATION

General Ecological Information No ecotoxicological studies are available.

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

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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.

14. TRANSPORT INFORMATION**D.O.T. Road/Rail**

Class	9
UN-No	3082
Packing group	III
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.

Loading instructions/Remarks

IATA_C	Not dangerous according to transport regulations.
IATA_P	Not dangerous according to transport regulations.
IMDG	Not dangerous according to transport regulations.
CFR_INWTR	USA: Not regulated for transport when package contains less than the reportable quantity listed in section 15 of the msds.
CFR_RAIL	USA: Not regulated for transport when package contains less than the reportable quantity listed in section 15 of the msds.
CFR_ROAD	USA: Not regulated for transport when package contains less than the reportable quantity listed in section 15 of the msds.

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.	56705700001-5032P		
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

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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 27174 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

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:

WARNING! This product contains a chemical known in the State of California to cause cancer.

- Carbon black, amorphous
CAS-No. 1333-86-4

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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

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.