

MATERIAL SAFETY DATA SHEET**844-2852 CHROMA-CHEM®ORGANIC YELLOW****OY**

Material no.		Version	1.39 / US
Specification	139148	Revision date	01/31/2013
Order Number		Print Date	04/06/2013
		Page	1 / 11

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

Trade name : 844-2852 CHROMA-CHEM®ORGANIC YELLOW OY
Use of the Substance / : Non-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**-Sweet ether-like odor.

May cause eye, skin and respiratory tract irritation.
Combustible liquid and vapor.

POTENTIAL HEALTH EFFECTS**Eye contact**

According to test results on similar CHROMA-CHEM® base mixtures, this product is classified as a mild eye irritant. May cause tearing or reddening of the eyes.

Skin Contact

A moderate skin irritant based on testing of similar CHROMA-CHEM® base mixtures. Prolonged or repeated contact may cause irritation.
Prolonged skin contact with large amounts of ether acetates may cause drowsiness.

Inhalation

Possibly irritating.
Excessive inhalation of solvent vapors may cause nasal and respiratory irritation and central nervous system effects including dizziness, weakness, fatigue, nausea, headache, possible unconsciousness and even death.

MATERIAL SAFETY DATA SHEET**844-2852 CHROMA-CHEM®ORGANIC YELLOW****OY**

Material no.

Version

1.39 / US

Specification

139148

Revision date

01/31/2013

Order Number

Print Date

04/06/2013

Page

2 / 11**Ingestion**

May cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Target Organs

Vapors may cause liver and kidney effects according to animal testing.

Chronic Health Hazard

High vapor concentrations (3000 ppm) of propylene glycol monomethyl ether acetate caused upper respiratory irritation and liver and kidney effects in subchronic animal testing. The relevance of these results to humans is not known.

High concentrations of titanium dioxide dust caused microscopic lung tumors in rats in lifetime inhalation studies. However, DuPont, the primary US manufacturer, based on a review of the test data and based on an epidemiological study of employees, concludes that titanium dioxide pigment will not cause chronic respiratory disease in humans at concentrations experienced in the workplace.

Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

High concentrations (0.1 to 0.2% in air) of ethyl benzene will irritate eyes, mucous membrane and respiratory tract, and will cause dizziness and a sense of constriction of the chest.

Suppliers of xylene have reported that high levels of exposure to xylene in some animal studies were reported to have affected the development of the embryo/fetus. These effects were often at levels which are toxic to the mother. The significance of these findings to human exposure has not been determined, particularly the exposure to the low levels of xylene found in this product.

3. COMPOSITION/INFORMATION ON INGREDIENTS**Information on ingredients / Hazardous components**

2-methoxy-1-methylethyl acetate

CAS-No.

108-65-6

Percent (Wt./ Wt.)

30 - 60 %

Stoddard solvent; Low boiling point naphtha - unspecified

CAS-No.

8052-41-3

Percent (Wt./ Wt.)

5 - 10 %

Titanium dioxide

CAS-No.

13463-67-7

Percent (Wt./ Wt.)

1 - 5 %

ethylbenzene

CAS-No.

100-41-4

Percent (Wt./ Wt.)

0.1 - 1 %

xylene

CAS-No.

1330-20-7

Percent (Wt./ Wt.)

1 - 5 %

Other information

This material is classified as hazardous under OSHA regulations.

MATERIAL SAFETY DATA SHEET**844-2852 CHROMA-CHEM®ORGANIC YELLOW****OY**

Material no.

Version

1.39 / US

Specification

139148

Revision date

01/31/2013

Order Number

Print Date

04/06/2013

Page

3 / 11**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

Remove contaminated clothing/shoes. Flush skin with water. Follow by washing with soap and water. If symptoms develop or persist, obtain medical attention. Wash clothing 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

Aspiration of material into the lungs may cause chemical pneumonitis (damage to lungs) which may be fatal.

If swallowed, do NOT induce vomiting. Have victim drink 8-10 ounces of water to dilute material in stomach. Get medical attention immediately. Never give anything by mouth to an unconscious person.

Should vomiting occur, be sure to keep victim's head below hips to avoid aspiration of vomitus into the lungs.

5. FIRE-FIGHTING MEASURES

Flash point

46.67 °C , 116 °F

Method: Tagliabue Closed Cup

OSHA Flammability Classification

Combustible Liquid**Suitable extinguishing media**

Use water spray or fog, foam, dry chemical or CO2.

Specific hazards during fire fighting

Combustible liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint.

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.

MATERIAL SAFETY DATA SHEET**844-2852 CHROMA-CHEM®ORGANIC YELLOW****OY**

Material no.		Version	1.39 / US
Specification	139148	Revision date	01/31/2013
Order Number		Print Date	04/06/2013
		Page	4 / 11

6. ACCIDENTAL RELEASE MEASURES**Additional advice**

Absorb spill with inert material, then place in a chemical waste container. After removal, flush contaminated area with water and collect for disposal. Clean up spills immediately. Remove sources of ignition and ventilate area. Use a respirator and other protective equipment as outlined in Section 8. Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

7. HANDLING AND STORAGE**Handling****Safe handling advice**

Keep away from heat. Keep away from sparks, flames and other sources of ignition. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use with adequate ventilation. The need for grounding and bonding of containers in accordance with OSHA 29 CFR 1910.106 and NFPA 77 should be assessed for all product transfers. Follow all MSDS/label precautions even after the 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****• Stoddard solvent; Low boiling point naphtha - unspecified**

CAS-No. 8052-41-3

Control parameters 100 ppm
500 ppm
2900 mg/m³
100 ppm
525 mg/m³

Time Weighted Average (TWA):(ACGIH)
PEL:(OSHA Z1)

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

• Titanium dioxide

CAS-No. 13463-67-7
10 mg/m³
15 mg/m³
Total dust.

Time Weighted Average (TWA):(ACGIH)
PEL:(OSHA Z1)

• ethylbenzene

CAS-No. 100-41-4
20 ppm
100 ppm
435 mg/m³

Time Weighted Average (TWA):(ACGIH)
PEL:(OSHA Z1)

MATERIAL SAFETY DATA SHEET**844-2852 CHROMA-CHEM®ORGANIC YELLOW****OY**

Material no.

Version

1.39 / US

Specification

139148

Revision date

01/31/2013

Order Number

Print Date

04/06/2013

Page

5 / 11100 ppm
435 mg/m3Time Weighted Average (TWA)
Permissible Exposure Limit (PEL):(US CA
OEL)125 ppm
545 mg/m3Short Term Exposure Limit (STEL):(US CA
OEL)• **xylene**

CAS-No.

1330-20-7

100 ppm
435 mg/m3

PEL:(OSHA Z1)

100 ppm
150 ppmTime Weighted Average (TWA):(ACGIH)
Short Term Exposure Limit
(STEL):(ACGIH)100 ppm
435 mg/m3Time Weighted Average (TWA)
Permissible Exposure Limit (PEL):(US CA
OEL)300 ppm
150 ppm
655 mg/m3Ceiling Limit Value:(US CA OEL)
Short Term Exposure Limit (STEL):(US CA
OEL)**Other information**

Exposure values for mineral spirits (CAS Nr 8052-41-3) are given as Stoddard solvent.
The AIHA WEEL for propylene glycol monomethyl ether acetate is 50 ppm TWA.

Engineering measures

Use explosion-proof ventilation equipment.

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
Color
Odorpaste
yellow
Sweet ether-like odor.

MATERIAL SAFETY DATA SHEET**844-2852 CHROMA-CHEM®ORGANIC YELLOW****OY**

Material no.

Specification

139148

Order Number

Version

Revision date

Print Date

Page

1.39 / US**01/31/2013****04/06/2013****6 / 11****Safety data**

Boiling point/range

> 143 °C

Flash point

46.67 °C

Method: Tagliabue Closed Cup

Relative density

1.1

Solubility/qualitative

Solubility in water: Negligible.

Viscosity, dynamic

70 - 90 KU (25 °C)

Solvents and Volatiles Data

% VOC (gm/l)

484

Evaporation rate

Slower than butyl acetate

10. STABILITY AND REACTIVITY

Conditions to avoid

Avoid high temperatures and sources of ignition.

Materials to avoid

oxidizing substances

11. TOXICOLOGICAL INFORMATION

Component Acute oral toxicity

2-methoxy-1-methylethyl acetate

108-65-6

LD50 Rat: 8532 mg/kg

Stoddard solvent; Low boiling point naphtha - unspecified

8052-41-3

LD50 Rat: > 5000 mg/kg

Titanium dioxide

13463-67-7

LD50 Rat: > 24000 mg/kg

ethylbenzene

100-41-4

LD50 Rat: 3500 mg/kg

xylene

1330-20-7

LD50 Rat: 3523 mg/kg

Component Acute inhalation
toxicity

2-methoxy-1-methylethyl acetate

108-65-6

LC50 Rat: > 4345 ppm / 6 h / vapour

Stoddard solvent; Low boiling point naphtha - unspecified

MATERIAL SAFETY DATA SHEET**844-2852 CHROMA-CHEM®ORGANIC YELLOW****OY**

Material no.

Specification

139148

Order Number

Version

Revision date

Print Date

Page

1.39 / US**01/31/2013****04/06/2013****7 / 11**

8052-41-3

LC50 Rat: > 5500 mg/m3 / 4 h

Titanium dioxide

13463-67-7

LC50 Rat: > 6820 mg/m3 / 4 h

Component Acute dermal toxicity

2-methoxy-1-methylethyl acetate

108-65-6

LD50 Rabbit: > 5000 mg/kg

Stoddard solvent; Low boiling point naphtha - unspecified

8052-41-3

LD50 Rabbit: > 3000 mg/kg

Titanium dioxide

13463-67-7

LD50 Rabbit: > 10000 mg/kg

ethylbenzene

100-41-4

LD50 Rabbit: 5000 mg/kg

xylene

1330-20-7

LD50 Rabbit: > 4300 mg/kg

Component Repeated dose toxicity

Titanium dioxide

13463-67-7

High concentrations of titanium dioxide dust caused microscopic lung tumors in rats in lifetime inhalation studies. However, DuPont, the primary US manufacturer, based on a review of the test data and based on an epidemiological study of employees, concludes that titanium dioxide pigment will not cause chronic respiratory disease in humans at concentrations experienced in the workplace.

Component carcinogenicity assessment

Titanium dioxide

13463-67-7

Contains a component which is classified as an IARC 2B carcinogen (possibly carcinogenic to humans).

ethylbenzene

100-41-4

Contains a component which is classified as an IARC 2B carcinogen (possibly carcinogenic to humans).

Component Teratogenicity

xylene

1330-20-7

inhalative Rat: in maternally non-toxic doses

NOAEL (No Observed Adverse Effect Level) teratogenesis: 2.165 mg/l Method:

OECD TG 414

Suppliers of xylene have reported that high levels of exposure to xylene in some animal studies were reported to have affected the development of the embryo/fetus. These effects were often at levels which are toxic to the

MATERIAL SAFETY DATA SHEET**844-2852 CHROMA-CHEM®ORGANIC YELLOW****OY**

Material no.		Version	1.39 / US
Specification	139148	Revision date	01/31/2013
Order Number		Print Date	04/06/2013
		Page	8 / 11

mother. The significance of these findings to human exposure has not been determined, particularly the exposure to the low levels of xylene found in this product.

Component teratogenicity assessment xylene
1330-20-7
Potential embryo-foetal toxicity and teratogenicity.

Component General Toxicity Information 2-methoxy-1-methylethyl acetate
108-65-6
High vapor concentrations (3000 ppm) of propylene glycol monomethyl ether acetate caused upper respiratory irritation and liver and kidney effects in subchronic animal testing. The relevance of these results to humans is not known.

xylene
1330-20-7
Overexposure to xylene has been suggested as a cause of the following effects in laboratory animals and may aggravate pre-existing disorders of these organs in humans: kidney damage; mild, reversible liver effects; effects on hearing and cardiac sensitization.

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 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 mineral spirits until the containers are considered generally product free.

14. TRANSPORT INFORMATION**Sea transport IMDG-Code**

Class	3
UN-No	1263

MATERIAL SAFETY DATA SHEET**844-2852 CHROMA-CHEM®ORGANIC YELLOW****OY**

Material no.		Version	1.39 / US
Specification	139148	Revision date	01/31/2013
Order Number		Print Date	04/06/2013
		Page	9 / 11

Packaging group III
EmS F-E, S-E
Proper technical name (Proper shipping name)
PAINT RELATED MATERIAL

Air transport ICAO-TI/IATA-DGR

Class 3
UN-No 1263
Packaging group III
Proper technical name (Proper shipping name)
Paint related material

Loading instructions/Remarks

IATA_C ERG-Code 3L
IATA_P ERG-Code 3L
CFR_INWTR In the U.S. this material may be classified as combustible liquid.
Combustible liquids are not regulated in packages 450 liters or less.
This applies for shipments by road and rail only.
CFR_RAIL In the U.S. this material may be classified as combustible liquid.
Combustible liquids are not regulated in packages 450 liters or less.
This applies for shipments by road and rail only.
CFR_ROAD In the U.S. this material may be classified as combustible liquid.
Combustible liquids are not regulated in packages 450 liters or less.
This applies for shipments by road and rail only.

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

This product contains the following non-hazardous components

NJTSR No. 800963-5163			
CAS-No.	Percent (Wt./ Wt.)	1 - 5 %	
NJTSR No.56705700001-6864P			
CAS-No. Trade Secret	Percent (Wt./ Wt.)	10 - 30 %	
NJTSR No.56705700001-5797P			
CAS-No. Trade Secret	Percent (Wt./ Wt.)	10 - 30 %	

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:

- ethylbenzene
CAS-No. 100-41-4
- xylene

MATERIAL SAFETY DATA SHEET**844-2852 CHROMA-CHEM®ORGANIC YELLOW****OY**

Material no.

Version

1.39 / US

Specification

139148

Revision date

01/31/2013

Order Number

Print Date

04/06/2013

Page

10 / 11

1330-20-7

CERCLA Reportable Quantities

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

- xylene
CAS-No. 1330-20-7
Reportable Quantity 7862 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
- Fire 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:

- ethylbenzene
CAS-No. 100-41-4
- xylene
CAS-No. 1330-20-7

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.

- ethylbenzene
CAS-No. 100-41-4

MATERIAL SAFETY DATA SHEET**844-2852 CHROMA-CHEM®ORGANIC YELLOW****OY**

Material no.		Version	1.39 / US
Specification	139148	Revision date	01/31/2013
Order Number		Print Date	04/06/2013
		Page	11 / 11

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)	Not listed/Not registered
• Japan (MITI)	Not listed/Not registered
• Korea (TCCL)	Listed/registered
• Philippines (PICCS)	Not listed/Not registered
• China	Listed/registered
• New Zealand	Listed/registered

16. OTHER INFORMATION**HMIS Ratings**

Health :	2*
Flammability :	2
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.