



Material Safety Data Sheet

89CN01-001 844-0061 CHROMA CHEM TITANIUM WHITE

1. Product and company identification

Code : 89CN01-001
Synonym : 844-0061 CHROMA CHEM TITANIUM WHITE
Material uses : Coatings: Surface coatings and finishes.
Manufacturer : Chemcraft® Coating Technology Inc.
311 Otterson Drive, Suite 60
Chico, CA 95928
Ph:530-894-3585 Fax:530-896-0657
In case of emergency : 1-800-424-5571
Validation date : 1/10/2006.
Print date : 10/12/2007.
Validator : A. Davis

2. Hazardous ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Low odour mineral spirits	64742-47-8	5 - 15
Propylene glycol monomethyl ether acetate	108-65-6	5 - 15
Silica, amorphous	7631-86-9	1 - 5

Trace impurities and additional material names not listed above may appear in other sections of this MSDS. These materials may be listed for toxicological concerns, local compliance, or other reasons.

* Toxicological information, if available, is listed in section 11

3. Hazards identification

Physical state : Liquid.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.

Effects of Acute Exposure : Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation.

Potential chronic health effects : **CARCINOGENIC EFFECTS**: Classified 4 (Probably not for humans.) by IARC, None. by OSHA [Titanium dioxide (TiO₂)].
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.

Medical conditions aggravated by over-exposure : Repeated or prolonged exposure to the substance can produce target organs damage.

See toxicological information (section 11)

4. First aid measures

Eye contact : Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

4. First aid measures

- Inhalation** : Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if symptoms occur. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

5. Fire-fighting measures

- Flammability of the product** : Flammable.
- Products of combustion** : These products are carbon oxides (CO, CO₂). Some metallic oxides.
- Extinguishing media**
- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Flammable liquid and vapor. Vapor may cause flash fire. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
- Special Remarks on Fire Hazards** : Container explosion may occur under fire conditions or when heated. Vapor may travel considerable distance to source of ignition and flash back. (Distillates (petroleum), hydrotreated light)
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Fire Hazards in Presence of Various Substances** : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
Non-flammable in the presence of the following materials or conditions: heat, oxidizing materials, reducing materials, combustible materials and moisture.
- Explosion Hazards in Presence of Various Substances** : Highly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge.

6. Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment. Do not touch or walk through spilled material.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion-proof means to transfer material to a sealable, appropriate container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

7. Handling and storage

- Handling** : Keep container closed. Use only with adequate ventilation. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.
- Storage** : Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

- Engineering measures** : Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Personal protection



- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

9. Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : The lowest known value is Closed cup: 47.2°C (117°F). (Pensky-Martens.). Open cup: 51.1°C (124°F). (Cleveland.). (2-Propanol, 1-methoxy, acetate)
- Flammable limits** : The greatest known range is Lower: 1.3% Upper: 13.1% (2-Propanol, 1-methoxy, acetate)
- Boiling/condensation point** : The lowest known value is 146°C (294.8°F) (2-Propanol, 1-methoxy, acetate). Weighted average: 187.4°C (369.3°F)
- Melting/freezing point** : May start to solidify at -58°C (-72.4°F) based on data for: Distillates (petroleum), hydrotreated light.
- Relative density** : Weighted average: 1.88 (Water = 1)
- Vapor pressure** : The highest known value is 0.3 kPa (2.4 mm Hg) (at 20°C) (2-Propanol, 1-methoxy, acetate).
- Vapor density** : The highest known value is 4.6 (Air = 1) (2-Propanol, 1-methoxy, acetate).
- Dispersibility properties** : Not dispersible in cold water, hot water. See solubility in methanol, diethyl ether, n-octanol.
- Solubility** : Easily soluble in diethyl ether, n-octanol. Soluble in methanol. Insoluble in cold water, hot water.

9 . Physical and chemical properties

10 . Stability and reactivity

- Stability and reactivity** : The product is stable.
- Incompatibility with various substances** : Reactive or incompatible with the following materials: oxidizing materials, reducing materials, acids and alkalis.
Slightly reactive or incompatible with the following materials: organic materials and metals.
Non-reactive or compatible with the following materials: combustible materials and moisture.

11 . Toxicological information

Toxicity data

<u>Product/ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Distillates (petroleum), hydrotreated light	LD50	5000 mg/kg	Oral	Rat
	LD50	3000 mg/kg	Dermal	Rabbit

- Chronic effects on humans** : **CARCINOGENIC EFFECTS:** Classified 4 (Probably not for humans.) by IARC, None. by OSHA [Titanium dioxide (TiO₂)].
Contains material which causes damage to the following organs: blood, lungs, liver.

- Other toxic effects on humans** : Slightly hazardous in case of skin contact (permeator), of ingestion, of inhalation.

- Special remarks on other toxic effects on humans** : Material is irritating to mucous membranes and upper respiratory tract. (Distillates (petroleum), hydrotreated light)

Specific effects

- Carcinogenic effects** : No known significant effects or critical hazards.
- Mutagenic effects** : No known significant effects or critical hazards.
- Teratogenicity / Reproductive toxicity** : No known significant effects or critical hazards.

12 . Ecological information

- Environmental precautions** : No known significant effects or critical hazards.
- Octanol/water partition coefficient** : The product is much more soluble in octanol.
- Bioconcentration factor** : Not available.
- Products of degradation** : These products are carbon oxides (CO, CO₂) and water. Some metallic oxides.
- Toxicity of the products of biodegradation** : The product itself and its products of degradation are not toxic.

13 . Disposal considerations

- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.


13 . Disposal considerations

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 . Transport information

Regulatory information	UN number	Class	PG*	Label
TDG Classification	1263 PAINT	3	II	

PG* : Packing group

15 . Regulatory information

United States

HCS Classification

: Combustible liquid
Target organ effects

U.S. Federal regulations

: SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: No products were found.
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

State regulations

: No products were found.

Canada

WHMIS (Canada)

: Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
Class D-2B: Material causing other toxic effects (Toxic).

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

16 . Other information

Label requirements

: CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:
BLOOD, LUNGS, LIVER.
FLAMMABLE LIQUID AND VAPOR.
VAPOR MAY CAUSE FLASH FIRE.

Hazardous Material Information System (U.S.A)

Health	*	1
Fire hazard		2
Reactivity		0
Personal protection		A

* Indicates may be chronic effects

National Fire Protection Association (U.S.A)



Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.