



## MM-97 - OIL ZINC CHROMATE

### SECTION 1: IDENTIFICATION

- 1.1 GHS Product identifier:** MM-97 - OIL ZINC CHROMATE
- 1.2 Recommended use of the chemical and restrictions on use:**  
Relevant uses: Solvent for coatings  
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:**  
Lanco Manufacturing Corp.  
Urb. Aponte #5  
00754 San Lorenzo - Puerto Rico - Estados Unidos  
Phone.: +1-787-736-4221 - Fax: +1-787-736-5313  
info@lancopaints.com  
http://www.lancopaints.com
- 1.4 Emergency phone number:** CHEMTREC (US Transportation) +1-800-424-9300 | CHEMTREC (International Transportation) +1-703-527-3887

### SECTION 2: HAZARD(S) IDENTIFICATION

- 2.1 Classification of the substance or mixture:**  
**29 CFR 1910.1200:**  
Classification of this product has been carried out in accordance with paragraph (d) of § 1910.1200.  
Carc. 1A: Carcinogenicity, Category 1A, H350  
Carc. 1B: Carcinogenicity, Category 1B, H350  
Eye Dam. 1: Serious eye damage, Category 1, H318  
Flam. Liq. 3: Flammable liquids, Category 3, H226  
Muta. 1B: Germ cell mutagenicity, Category 1B, H340  
Repr. 2: Reproductive toxicity, Category 2, H361  
Resp. Sens. 1: Sensitisation, respiratory, Category 1, H334  
Skin Irrit. 2: Skin irritation, Category 2, H315  
Skin Sens. 1: Sensitisation, skin, Category 1, H317  
STOT RE 2: Specific target organ toxicity, repeated exposure, Category 2, H373

**2.2 Label elements:**

**29 CFR 1910.1200:**

Danger



**Hazard statements:**

Carc. 1A: H350 - May cause cancer  
Carc. 1B: H350 - May cause cancer  
Eye Dam. 1: H318 - Causes serious eye damage  
Flam. Liq. 3: H226 - Flammable liquid and vapour  
Muta. 1B: H340 - May cause genetic defects  
Repr. 2: H361 - Suspected of damaging fertility or the unborn child  
Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled  
Skin Irrit. 2: H315 - Causes skin irritation  
Skin Sens. 1: H317 - May cause an allergic skin reaction  
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure

**Precautionary statements:**

P101: If medical advice is needed, have product container or label at hand  
P102: Keep out of reach of children  
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
P264: Wash thoroughly after use  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P370+P378: In case of fire: Use ABC powder extinguisher to put it out  
P501: Dispose of contents and / or their container according to the separated collection system used in your municipality

- CONTINUED ON NEXT PAGE -



**MM-97 - OIL ZINC CHROMATE**

**SECTION 2: HAZARD(S) IDENTIFICATION (continued)**

**Substances that contribute to the classification**

Stoddard solvent, < 0.1 % EC 200-753-7; Phthalic anhydride ; Titanium dioxide; C.I.Pigment Yellow 36

**2.3 Other hazards which do not result in classification:**

Non-applicable

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances:**

Non-applicable

**3.2 Mixtures:**

**Chemical description:** Solvent/s

**Components:**

Remaining components are non-hazardous and/or present at amounts below reportable limits. Exact percentage values for components are proprietary in accordance with 29 CFR 1910.1200(i). Therefore, in accordance with Appendix D to § 1910.1200, the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 471-34-1	<b>Calcium Carbonate</b>	25 - <50 %
CAS: 14807-96-6	<b>Talc</b>	10 - <25 %
CAS: 7732-18-5	<b>Water</b>	10 - <25 %
CAS: 64742-88-7	<b>Solvent naphtha (petroleum), medium aliph.</b> Asp. Tox. 1: H304; Flam. Liq. 4: H227 - Danger	10 - <25 %
CAS: 8052-41-3	<b>Stoddard solvent, &lt; 0.1 % EC 200-753-7</b> Asp. Tox. 1: H304; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT RE 2: H373 - Danger	10 - <25 %
CAS: 8001-30-7	<b>Corn oil</b>	2.5 - <10 %
CAS: 85-44-9	<b>Phthalic anhydride</b> Acute Tox. 4: H302; Eye Dam. 1: H318; Resp. Sens. 1: H334; Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT SE 3: H335 - Danger	2.5 - <10 %
CAS: 13463-67-7	<b>Titanium dioxide</b> Carc. 2: H351 - Warning	1 - <2.5 %
CAS: 37300-23-5	<b>C.I.Pigment Yellow 36</b> Acute Tox. 4: H302; Carc. 1A: H350; Skin Sens. 1: H317 - Danger	1 - <2.5 %
CAS: 64742-49-0	<b>Naphtha (petroleum), hydrotreated light, &lt; 0.1 % EC 200-753-7</b> Asp. Tox. 1: H304; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT SE 3: H336 - Danger	<1 %
CAS: 22464-99-9	<b>2-ethylhexanoic acid, zirconium salt</b> Repr. 2: H361 - Warning	<1 %
CAS: 64742-82-1	<b>Naphtha (petroleum), hydrodesulphurized heavy</b> Asp. Tox. 1: H304; Carc. 1B: H350; Muta. 1B: H340 - Danger	<1 %
CAS: 136-52-7	<b>Cobalt bis(2-ethylhexanoate)</b> Eye Irrit. 2: H319; Repr. 2: H361; Skin Sens. 1A: H317 - Warning	<1 %

To obtain more information on the hazards of the substances consult sections 8, 11, 12, 15 and 16.

**SECTION 4: FIRST-AID MEASURES**

**4.1 Description of necessary measures:**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

**By inhalation:**

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

- CONTINUED ON NEXT PAGE -



## MM-97 - OIL ZINC CHROMATE

### SECTION 4: FIRST-AID MEASURES (continued)

**By skin contact:**

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

**By eye contact:**

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

**By ingestion/aspiration:**

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

**4.2 Most important symptoms/effects, acute and delayed:**

Acute and delayed effects are indicated in sections 2 and 11.

**4.3 Indication of immediate medical attention and special treatment needed, if necessary:**

Non-applicable

### SECTION 5: FIRE-FIGHTING MEASURES

**5.1 Suitable (and unsuitable) extinguishing media:**

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO<sub>2</sub>). IT IS RECOMMENDED NOT to use tap water as an extinguishing agent.

**5.2 Specific hazards arising from the chemical:**

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

**5.3 Special protective equipment and precautions for fire-fighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

**Additional provisions:**

As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Only properly trained personnel should be involved in firefighting. Evacuate nonessential personnel from the fire area. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures:**

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inertization agent. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

**6.2 Environmental precautions:**

The characteristic of Ignitability per RCRA could apply to the unused product if it becomes a waste material. The EPA hazardous waste number D001 could apply. It is the responsibility of the waste generator to evaluate whether his wastes are hazardous by characteristics or listing.

**6.3 Methods and materials for containment and cleaning up:**

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

**6.4 Reference to other sections:**

See sections 8 and 13.

- CONTINUED ON NEXT PAGE -



**MM-97 - OIL ZINC CHROMATE**

**SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling:**

A.- Precautions for safe manipulation

Comply with the current standards 29 CFR 1910 Occupational Safety and Health Standards. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Because the product is a flammable liquid, storage should meet the requirement of 29 CFR 1910.106, Flammable and Combustible Liquids Code. Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems and with the minimum requirements for protecting the security and health of workers. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

PREGNANT WOMEN SHOULD NOT BE EXPOSED TO THIS PRODUCT. Transfer in fixed places that comply with the necessary security conditions (emergency showers and eyewash stations in close proximity), using personal protection equipment, especially on the hands and face (See section 8). Limit manual transfers to containers of small amounts. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

**7.2 Conditions for safe storage, including any incompatibilities:**

A.- Technical measures for storage

- Minimum Temp.: 41 °F
- Maximum Temp.: 86 °F
- Maximum time: 6 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

**7.3 Specific end use(s):**

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters:**

Substances whose occupational exposure limits have to be monitored in the workplace

Identification	Environmental limits		
	8-hour TWA PEL	500 ppm	2900 mg/m <sup>3</sup>
Stoddard solvent, < 0.1 % EC 200-753-7 CAS: 8052-41-3	Ceiling Values - TWA PEL		
Phthalic anhydride CAS: 85-44-9	8-hour TWA PEL	2 ppm	12 mg/m <sup>3</sup>
	Ceiling Values - TWA PEL		
Titanium dioxide CAS: 13463-67-7	8-hour TWA PEL		15 mg/m <sup>3</sup>
	Ceiling Values - TWA PEL		

**8.2 Appropriate engineering controls:**

A.- Individual protection measures, such as personal protective equipment


Always provide effective general and, when necessary, local exhaust ventilation to maintain the ambient workplace atmosphere below the exposure limits.. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1. All information contained herein is a recommendation, the information on clothing performance must be combined with professional judgment, and a clear understanding of the clothing application, to provide the best protection to the worker. All chemical protective clothing use must be based on a hazard assessment to determine the risks for exposure to chemicals and other hazards. Conduct hazard assessments in accordance with 29 CFR 1910.132.

B.- Respiratory protection


- CONTINUED ON NEXT PAGE -

**MM-97 - OIL ZINC CHROMATE**

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**


Pictogram	PPE	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment. Use respirator in accordance with manufacturer's use limitations and OSHA standard 1910.134 (29CFR)

C.- Specific protection for the hands



Pictogram	PPE	Remarks
 Mandatory hand protection	NON-disposable chemical protective gloves	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin. Use gloves in accordance with manufacturer's use limitations and OSHA standard 1910.138 (29CFR)

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application



D.- Ocular and facial protection

Pictogram	PPE	Remarks
 Mandatory face protection	Face shield	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing. Use this PPE in accordance with manufacturer's use limitations and OSHA standard 1910.133 (29CFR)

E.- Bodily protection

Pictogram	PPE	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	For professional use only. Clean periodically according to the manufacturer's instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2002	 Eyewash stations	DIN 12 899 ISO 3864-1:2002

**Environmental exposure controls:**

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties:**

For complete information see the product datasheet.

**Appearance:**

Physical state at 68 °F: Liquid  
Appearance: Viscous  
Color:  Green  
Odor: Solvent

\*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -



## MM-97 - OIL ZINC CHROMATE

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Odour threshold:	Non-applicable *
<b>Volatility:</b>	
Boiling point at atmospheric pressure:	266 °F
Vapour pressure at 68 °F:	2042 Pa
Vapour pressure at 122 °F:	80.45 (10.73 kPa)
Evaporation rate at 68 °F:	Non-applicable *
<b>Product description:</b>	
Density at 68 °F:	1394 kg/m <sup>3</sup>
Relative density at 68 °F:	1.394
Dynamic viscosity at 68 °F:	242.65 cP
Kinematic viscosity at 68 °F:	174.08 cSt
Kinematic viscosity at 104 °F:	>20.5 cSt
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 68 °F:	Non-applicable *
Partition coefficient n-octanol/water 68 °F:	Non-applicable *
Solubility in water at 68 °F:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
<b>Flammability:</b>	
Flash Point:	108 °F
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	392 °F
Lower flammability limit:	Not available
Upper flammability limit:	Not available
<b>Explosive:</b>	
Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *
<b>9.2 Other information:</b>	
Surface tension at 68 °F:	Non-applicable *
Refraction index:	Non-applicable *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

### SECTION 10: STABILITY AND REACTIVITY

#### 10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

#### 10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

#### 10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

#### 10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

- CONTINUED ON NEXT PAGE -



## MM-97 - OIL ZINC CHROMATE

### SECTION 10: STABILITY AND REACTIVITY (continued)

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

#### 10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

#### 10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

##### Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

##### A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

##### B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for inhalation. For more information see section 3.

##### C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces serious eye damage after contact.

##### D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Exposure to this product can cause cancer. For more specific information on the possible health effects see section 2.  
IARC: Titanium dioxide (2B); Talc (3); Quartz (RCS < 1 %) (1); Naphtha (petroleum), hydrodesulphurized heavy (1); 2-butoxyethanol (3); C.I.Pigment Yellow 36 (1)
- Mutagenicity: Exposure to this product can cause genetic modifications. For more specific information on the possible health effects see section 2.
- Reproductive toxicity: Suspected of damaging fertility or the unborn child

##### E- Sensitizing effects:

- Respiratory: Prolonged exposure can result in specific respiratory hypersensitivity.
- Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

##### F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for inhalation. For more information see section 3.

##### G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Exposure in high concentration can cause a breakdown in the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

##### H- Aspiration hazard:

Based on available data, the classification criteria are not met, however it does contain substances classified as dangerous for this effect. For more information see section 3.

- CONTINUED ON NEXT PAGE -



**MM-97 - OIL ZINC CHROMATE**

**SECTION 11: TOXICOLOGICAL INFORMATION (continued)**

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
Titanium dioxide CAS: 13463-67-7	LD50 oral	10000 mg/kg	Rat
	LD50 dermal	10000 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
Phthalic anhydride CAS: 85-44-9	LD50 oral	1530 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Solvent naphtha (petroleum), medium aliph. CAS: 64742-88-7	LD50 oral	5100 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Calcium Carbonate CAS: 471-34-1	LD50 oral	6450 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
C.I.Pigment Yellow 36 CAS: 37300-23-5	LD50 oral	500 mg/kg (ATEi)	
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9	LD50 oral	2043 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Naphtha (petroleum), hydrodesulphurized heavy CAS: 64742-82-1	LD50 oral	5100 mg/kg	Rat
	LD50 dermal	3160 mg/kg	Rabbit
	LC50 inhalation	12 mg/L (6 h)	Rat

**SECTION 12: ECOLOGICAL INFORMATION**

The experimental information related to the eco-toxicological properties of the product itself is not available

**12.1 Ecotoxicity (aquatic and terrestrial, where available):**

Identification	Acute toxicity		Species	Genus
	LC50	EC50		
Calcium Carbonate CAS: 471-34-1	LC50	56000 mg/L (96 h)	Gambusia affinis	Fish
	EC50	Non-applicable		
	EC50	Non-applicable		
Talc CAS: 14807-96-6	LC50	100000 mg/L (24 h)	Brachydanio rerio	Fish
	EC50	Non-applicable		
	EC50	Non-applicable		
Solvent naphtha (petroleum), medium aliph. CAS: 64742-88-7	LC50	800 mg/L (96 h)	Salmo gairdneri	Fish
	EC50	100 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	450 mg/L (96 h)	Selenastrum capricornutum	Algae
Phthalic anhydride CAS: 85-44-9	LC50	Non-applicable		
	EC50	Non-applicable		
	EC50	60 mg/L (96 h)	Pseudokirchneriella subcapitata	Algae
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9	LC50	270 mg/L (96 h)	N/A	Fish
	EC50	Non-applicable		
	EC50	Non-applicable		
Naphtha (petroleum), hydrodesulphurized heavy CAS: 64742-82-1	LC50	Non-applicable		
	EC50	4.3 mg/L (96 h)	Crangon crangon	Crustacean
	EC50	Non-applicable		

**12.2 Persistence and degradability:**

- CONTINUED ON NEXT PAGE -





**MM-97 - OIL ZINC CHROMATE**

**SECTION 12: ECOLOGICAL INFORMATION (continued)**

Identification	Degradability		Biodegradability	
Phthalic anhydride CAS: 85-44-9	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	85.2 %
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9	BOD5	Non-applicable	Concentration	20 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	99 %

**12.3 Bioaccumulative potential:**

Identification	Bioaccumulation potential	
Solvent naphtha (petroleum), medium aliph. CAS: 64742-88-7	BCF	
	Pow Log	4.6
	Potential	
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9	BCF	
	Pow Log	2.96
	Potential	
Naphtha (petroleum), hydrodesulphurized heavy CAS: 64742-82-1	BCF	
	Pow Log	4
	Potential	

**12.4 Mobility in soil:**

Identification	Absorption/desorption		Volatility	
Phthalic anhydride CAS: 85-44-9	Koc	36	Henry	Non-applicable
	Conclusion	Very High	Dry soil	Non-applicable
	Surface tension	1.531E-2 N/m (615.97 $\sigma_F$ )	Moist soil	Non-applicable
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9	Koc	Non-applicable	Henry	2.94E-1 Pa·m <sup>3</sup> /mol
	Conclusion	Non-applicable	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes

**12.5 Results of PBT and vPvB assessment:**

Non-applicable

**12.6 Other adverse effects:**

Not described

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Disposal methods:**

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations. In case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommend disposal down the drain. See epigraph 6.2.

**Regulations related to waste management:**

Legislation related to waste management:

40 CFR Part 261- IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

**SECTION 14: TRANSPORT INFORMATION**

**Transport of dangerous goods by land:**

With regard to 49 CFR on the Transport of Dangerous Goods:

## MM-97 - OIL ZINC CHROMATE

### SECTION 14: TRANSPORT INFORMATION (continued)



- 14.1 UN number:** UN1263  
**14.2 UN proper shipping name:** PAINT RELATED MATERIAL  
**14.3 Transport hazard class(es):** 3  
 Labels: 3  
**14.4 Packing group, if applicable:** III  
**14.5 Environmental hazard:** No  
**14.6 Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises**  
 Physico-Chemical properties: see section 9  
**14.7 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Non-applicable

#### Transport of dangerous goods by sea:

With regard to IMDG 38-16:



- 14.1 UN number:** UN1263  
**14.2 UN proper shipping name:** PAINT RELATED MATERIAL  
**14.3 Transport hazard class(es):** 3  
 Labels: 3  
**14.4 Packing group, if applicable:** III  
**14.5 Environmental hazard:** No  
**14.6 Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises**  
 Physico-Chemical properties: see section 9  
**14.7 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Non-applicable

#### Transport of dangerous goods by air:

With regard to IATA/ICAO 2018:



- 14.1 UN number:** UN1263  
**14.2 UN proper shipping name:** PAINT RELATED MATERIAL  
**14.3 Transport hazard class(es):** 3  
 Labels: 3  
**14.4 Packing group, if applicable:** III  
**14.5 Environmental hazard:** No  
**14.6 Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises**  
 Physico-Chemical properties: see section 9  
**14.7 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Non-applicable

### SECTION 15: REGULATORY INFORMATION

#### 15.1 Safety, health and environmental regulations specific for the product in question:

- CONTINUED ON NEXT PAGE -



## MM-97 - OIL ZINC CHROMATE

### SECTION 15: REGULATORY INFORMATION (continued)

SARA Title III - Toxic Chemical Release Inventory Reporting (Section 313): Phthalic anhydride ; Cobalt bis(2-ethylhexanoate)  
California Proposition 65 (the Safe Drinking Water and Toxic Enforcement Act of 1986): Titanium dioxide  
The Toxic Substances Control Act (TSCA) : Calcium Carbonate ; Talc ; Water ; Solvent naphtha (petroleum), medium aliph. ; Stoddard solvent, < 0.1 % EC 200-753-7 ; Corn oil ; Phthalic anhydride ; Titanium dioxide ; C.I.Pigment Yellow 36 ; Naphtha (petroleum), hydrotreated light, < 0.1 % EC 200-753-7 ; 2-ethylhexanoic acid, zirconium salt ; Naphtha (petroleum), hydrodesulphurized heavy ; Cobalt bis(2-ethylhexanoate)  
Massachusetts RTK - Substance List: Phthalic anhydride ; Cobalt bis(2-ethylhexanoate)  
New Jersey Worker and Community Right-to-Know Act: Talc ; Stoddard solvent, < 0.1 % EC 200-753-7 ; Phthalic anhydride ; Titanium dioxide ; C.I.Pigment Yellow 36 ; Cobalt bis(2-ethylhexanoate)  
New York RTK - Substance list: Stoddard solvent, < 0.1 % EC 200-753-7 ; Phthalic anhydride ; Titanium dioxide ; Cobalt bis(2-ethylhexanoate)  
Pennsylvania Worker and Community Right-to-Know Law: Talc ; Stoddard solvent, < 0.1 % EC 200-753-7 ; Corn oil ; Phthalic anhydride ; Titanium dioxide ; Cobalt bis(2-ethylhexanoate)  
CANADA-Domestic Substances List (DSL): Calcium Carbonate ; Talc ; Water ; Solvent naphtha (petroleum), medium aliph. ; Stoddard solvent, < 0.1 % EC 200-753-7 ; Corn oil ; Phthalic anhydride ; Titanium dioxide ; C.I.Pigment Yellow 36 ; Naphtha (petroleum), hydrotreated light, < 0.1 % EC 200-753-7 ; 2-ethylhexanoic acid, zirconium salt ; Naphtha (petroleum), hydrodesulphurized heavy ; Cobalt bis(2-ethylhexanoate)  
CANADA-Non-Domestic Substances List (NDSL): Non-applicable  
NTP (National Toxicology Program): Non-applicable  
Minnesota - Hazardous substances ERTK: Talc ; Stoddard solvent, < 0.1 % EC 200-753-7 ; Phthalic anhydride ; Titanium dioxide ; C.I.Pigment Yellow 36 ; Naphtha (petroleum), hydrotreated light, < 0.1 % EC 200-753-7 ; Naphtha (petroleum), hydrodesulphurized heavy ; Cobalt bis(2-ethylhexanoate)  
Rhode Island - Hazardous substances RTK: Talc ; Stoddard solvent, < 0.1 % EC 200-753-7 ; Corn oil ; Phthalic anhydride ; Titanium dioxide  
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096): Non-applicable  
Hazardous substances release notification under CERCLA sections 102-103 (40 CFR Part 302): Phthalic anhydride (5000 pounds)

#### Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

#### Other legislation:

The Toxic Substances Control Act (TSCA)  
Occupational Safety and Health Standards (1910 Subpart Z - Toxic and Hazardous Substances)

### SECTION 16: OTHER INFORMATION

#### Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with Appendix d to §1910.1200 - Safety data sheets

#### Texts of the legislative phrases mentioned in section 2:

H315: Causes skin irritation  
H373: May cause damage to organs through prolonged or repeated exposure  
H318: Causes serious eye damage  
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H317: May cause an allergic skin reaction  
H350: May cause cancer  
H350: May cause cancer  
H361: Suspected of damaging fertility or the unborn child  
H340: May cause genetic defects  
H226: Flammable liquid and vapour

#### Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

#### 29 CFR 1910.1200:

- CONTINUED ON NEXT PAGE -



## MM-97 - OIL ZINC CHROMATE

### SECTION 16: OTHER INFORMATION (continued)

Acute Tox. 4: H302 - Harmful if swallowed  
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways  
Carc. 1A: H350 - May cause cancer  
Carc. 1B: H350 - May cause cancer  
Carc. 2: H351 - Suspected of causing cancer  
Eye Dam. 1: H318 - Causes serious eye damage  
Eye Irrit. 2: H319 - Causes serious eye irritation  
Flam. Liq. 3: H226 - Flammable liquid and vapour  
Flam. Liq. 4: H227 - Combustible liquid  
Muta. 1B: H340 - May cause genetic defects  
Repr. 2: H361 - Suspected of damaging fertility or the unborn child  
Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled  
Skin Irrit. 2: H315 - Causes skin irritation  
Skin Sens. 1: H317 - May cause an allergic skin reaction  
Skin Sens. 1A: H317 - May cause an allergic skin reaction  
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure  
STOT SE 3: H335 - May cause respiratory irritation  
STOT SE 3: H336 - May cause drowsiness or dizziness

#### **Advice related to training:**

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

#### **Principal bibliographical sources:**

Occupational Safety & Health Administration (OSHA).

#### **Abbreviations and acronyms:**

IMDG: International maritime dangerous goods code  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organisation  
COD: Chemical Oxygen Demand  
BOD5: 5-day biochemical oxygen demand  
BCF: Bioconcentration factor  
LD50: Lethal Dose 50  
CL50: Lethal Concentration 50  
EC50: Effective concentration 50  
Log-POW: Octanol-water partition coefficient  
Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current USA legislation, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

END OF SAFETY DATA SHEET