

Section 1 - Product Identification

# Material Safety Data Sheet

The Morfin Senour Co  
101 Prospect Ave. N.W.  
Cleveland, OH 44115

(216) 566-2917  
(216) 566-2902  
April 9, 2000

Emergency telephone number  
Information telephone number  
Date of preparation

**MARSHA**  
**SEKUR**  
**PARMIS**  
ACCREDITED PRODUCTS

## CROSSFIRE® Acrylic Enamel System

CF-ACR/N

CAS No.	Section 2 - Hazardous Ingredients (percent by weight)	ACOSH TLV	OSHA PEL	Units	Vapor Pressure (mm Hg)	52-LF (Pb)	52-LL (Pb)	53-LF (Pb)	53-LL (Pb)	CH254 Standard Parameter
64742-89-8	V.M. & P. Naphtha	300	300	PPM	12.0	0 1		0 1	0	
64742-88-7	Mineral Spirit	100	100	PPM	2.0	1 2	1-2	1 2	1 2	
108-98-3	Toluene	50	100	PPM (Skin)	27.6	0 3	0-3	0 11	0-11	
130-41-4	Ethylbenzene	100	100	PPM	7.1	4-5	4-5	4-5	4-5	
1330-20-7	Xylene	100	100	PPM	5.9	20-41	20-41	25-41	25-41	
111-76-2	2-Butoxyethanol	25	25	PPM (Skin)	0.6	1-2	1-2	1 2	1-2	
87-64-1	Acetone	500	1000	PPM	180.5	4-6	4-6			
78-93-3	Methyl Ethyl Ketone	200	200	PPM	70.0	0-4	0-4	0 4	0-4	
107-87-9	Methyl n-Propyl Ketone	200	200	PPM	27.8	7-8	7-8			
123-86-4	n-Butyl Acetate	150	150	PPM	10.0	1-4	1-4	1 4	1-4	24
112-87-2	2-Butoxyethyl Acetate	Not Established	Not Established		1.0	0-2	0-2	0 2	0-2	
28182-81-2	Hexamethylene Diisocyanate Polymer	0.5	0.5	Mg/M3 Suppl. or L.T.I.						76
822-06-0	Hexamethylene Diisocyanate (max)	0.005	0.005	PPM	0.05					0.2
Unknown	Coarse Mica	3	3	Mg/M3 as Dust		0-5	0-5	0-5	0-5	
1333-88-4	Carbon Black	3.5	3.5	Mg/M3		0-1	0-1	0-1	0-1	
Unknown	Hindered Amine Light Stabilizer	Not Established	Not Established	Mg/M3 as Dust (Resp. Fraction)		1	1			
13463-67-7	Titanium Dioxide	10	10 [5]			0-20	0-20	0-20	0-20	
1344-37-2	Lead Chromate	0.05	0.05	Mg/M3		<15	<15		15	
12856-85-5	Molybdate Orange	0.5	0.5	Mg/M3		0-2	0-2	0-2	0-2	
8007-18-9	Nickel Anthronyl Titanate	0.5	0.5	Mg/M3		0-2	0-2	0-2	0-2	
§	Chromium Compound, [% Chromium]					max. 15 [2.2]	max. 15 [2.2]	max. 15 [2.2]	max. 15 [2.2]	
§	Nickel Compound, [% Nickel]					2 [0.05]	2 [0.05]	2 [0.05]	2 [0.05]	
§	Antimony Compound, [% Antimony]					2 [0.2]	2 [0.2]	2 [0.2]	2 [0.2]	
§	Lead Compound, [% Lead]					max. 15 [9.0]	max. 15 [9.0]	max. 15 [9.0]	max. 15 [9.0]	
	Weight per Gallon (lbs.)					8-10	8-11	8-10	5-11	8.93
	VOC (Volatiles Organic Compound) - ds, Totals - lbs/gal - maximum					3.5	3.5	5.0	5.0	2.14
	VOC Less Water & Fedex Exempt Solvents - lbs/gal - maximum					3.5	3.5	5.0	5.0	2.14
	Photochemically Reactive					Yes	Yes	Yes	Yes	No
	Flash Point (°C)					30-50	30-50	30-50	30-50	81
	DOL Storage Category					IB	IB	IB	IB	1B
	HVIS (NFPA) Rating: Health - flammability - reactivity					2-3 0	2-3 0	2-3 0	2-3 0	2-3 1

P E R C E N T B Y W E I G H T

## Section 3 — Physical Data

PRODUCT WEIGHT	See Table	Sliver (1/2" dia)	1.5	1.5	1.5
NET WEIGHT	1.105	1.105	1.105	1.105	1.105
NET VOLUME	0.040	0.040	0.040	0.040	0.040
NET WEIGHT PER VOLUME	27.6	27.6	27.6	27.6	27.6

## Section 4 — Fire and Explosion Hazard Data

**FLAMMABILITY:** Classifies as a flammable liquid (see Table).  
**FLASH POINT:** See Table.  
**EXHAUSTION:** Flammable flash below 100°C.  
 Carbon Dioxide, Nitrogen, Oxygen, and Steam  
 Vapor concentrations may explode when exposed to extreme heat. Appropriate fire extinguishers should be used. Water spray may be ineffective. In water is used, fire should be extinguished. Water may be used to cool closed containers to prevent pressure build-up and possible explosion. Do not use water on an open container.  
**SPECIAL FIRE FIGHTING PRECAUTIONS:**  
 Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. In water is used, fire should be extinguished. Water may be used to cool closed containers to prevent pressure build-up and possible explosion. Do not use water on an open container.

## Section 5 — Health Hazard Data

**TOXICITY OF INGREDIENTS:**  
 Exposure may be by INHALATION, SKIN or EYE CONTACT, depending on conditions of use and amount of exposure. See following information for proper use, handling, and personal protective equipment.  
**ACUTE Health Hazards:**  
 Irritation of eyes, skin, and respiratory system. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.  
 Certain colorants contain lead, tin, and cadmium. Acute occupational exposure to lead, tin, and cadmium may result in symptoms similar to chronic overexposure described below.  
**LEAD:** Lead and its compounds are toxic. Symptoms of lead poisoning include weakness, fatigue, and loss of coordination. Lead and its compounds are indicators of excessive exposure to lead. Lead is absorbed through the skin, but only in small amounts. Lead is absorbed through the skin, but only in small amounts.  
**TIN:** Tin and its compounds are toxic. Symptoms of tin poisoning include weakness, fatigue, and loss of coordination. Tin and its compounds are indicators of excessive exposure to tin. Tin is absorbed through the skin, but only in small amounts.  
**CADMIUM:** Cadmium and its compounds are toxic. Symptoms of cadmium poisoning include weakness, fatigue, and loss of coordination. Cadmium and its compounds are indicators of excessive exposure to cadmium. Cadmium is absorbed through the skin, but only in small amounts.  
**CHRONIC Health Hazards:**  
 If SKINNED: Get medical attention.  
 If IN EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.  
 If SWALLOWED: Get medical attention.  
 Certain colors contain lead and chromate (see Table and PRODUCT LABEL).  
 Chronic overexposure to lead may result in damage to the blood-forming, nervous, urinary, and reproductive systems (including embryonic effects). Symptoms include abdominal discomfort or pain, constipation, loss of appetite, metallic taste, anemia, headache, nervous irritability, weakness, muscle and joint pain, headache and dizziness. Chromate is a known carcinogen and respiratory cancer. Available evidence indicates that lead chromate (chromium yellow, cadmium yellow) does not present this hazard.  
 Chromate is classified by IARC as possibly carcinogenic to humans (group 2B) based on experimental animal data, however, there is insufficient evidence in humans for this carcinogenicity.  
 Cobalt and cobalt compounds are classified by IARC as possibly carcinogenic to humans (group 2B) based on experimental animal data, however, there is inadequate evidence in humans for this carcinogenicity.  
 Solvents containing XYLENES, Benzene, and Toluene are classified by IARC as possibly carcinogenic to humans (group 2B) based on experimental animal data, however, there is inadequate evidence in humans for this carcinogenicity.  
 Solvents containing XYLENES, Benzene, and Toluene are classified by IARC as possibly carcinogenic to humans (group 2B) based on experimental animal data, however, there is inadequate evidence in humans for this carcinogenicity.

## Section 6 — Reactivity Data

**STABILITY:** Stable.  
**COMPATIBILITY:** No known incompatibilities.  
 Metal ions contain various oxidizing agents. Oxidizing agents may cause fire or explosion when in contact with hydrogen, hydrocarbons, alcohols, amines and other compounds which react with oxidizing agents. Do not mix with strong oxidizing agents.  
 Oxidizing agents may cause fire or explosion when in contact with hydrogen, hydrocarbons, alcohols, amines and other compounds which react with oxidizing agents. Do not mix with strong oxidizing agents.

## Section 7 — Spill Or Leak Procedures

Remove all sources of ignition. Ventilate and remove with inert absorbent. Remove all sources of ignition. Ventilate and remove with inert absorbent. Remove all sources of ignition. Ventilate and remove with inert absorbent.

## Section 8 — Protection Information

Obtain color formulas and use table and PRODUCT LABEL before use of lead and tin pigments. Obtain color formulas and use table and PRODUCT LABEL before use of lead and tin pigments. Obtain color formulas and use table and PRODUCT LABEL before use of lead and tin pigments.

## Section 9 — Precautions

Wear safety spectacles with unperfected side shields. Do not use in confined spaces. Do not use in confined spaces. Do not use in confined spaces.

## Section 10 — Other Regulatory Information

Obtain color formulas and use table and PRODUCT LABEL before use of lead and tin pigments. Obtain color formulas and use table and PRODUCT LABEL before use of lead and tin pigments. Obtain color formulas and use table and PRODUCT LABEL before use of lead and tin pigments.