

# 888-16 STEEL

Revision Date: 2013/04/10

## Section 1: PRODUCT INFORMATION

**Chemical family:** Mixture.

**Product uses:** Coating.

**Product name:** 888-16 Steel.

**Manufacturer:** Flame Control Coatings Inc.  
4120 Hyde Park Blvd.,  
P.O.Box 786  
Niagara Falls, New York, 14305.

**Manufacturer emergency phone number:** 800-535-5053

**Supplier:** Same as manufacturer.

**TDG classification:** PAINT  
UN1263  
Class 3  
PG III.



**WHMIS classification:**

B2, D2A, D2B.



**DSL status:** The substance(s) listed in section 2 appear on the Domestic Substances List.

**Supplier MSDS date:** 2013/04/10.

## Section 2: HAZARDOUS INGREDIENTS

C.A.S.	CONCENTRATION %	Ingrédient	V.L.E.	DL/50	CL/50
100-41-4	0.1-1.0	ETHYLBENZENE	100 PPM	3500 MG/KG RAT ORAL  >5000 MG/KG RABBIT DERMAL	4000 PPM/4H RABBIT INHALATION 55,000 MG/M3/2H RAT INHALATION  35,500 MG/M3/2H MOUSE INHALATION
107-87-9	5-10	2-PENTANONE	150 PPM	1600 MG/KG RAT ORAL  1600 MG/KG MOUSE ORAL  6500 MG/KG RABBIT DERMAL	22,000 MG/M3/2H MOUSE INHALATION
12001-26-2	1-5	MICA	3 MG/M3 (R)	NOT AVAILABLE	NOT AVAILABLE
1330-20-7	10-30	XYLENE	100 PPM	4300 MG/KG RAT ORAL 2119 MG/KG MOUSE ORAL >1700 MG/KG RABBIT DERMAL	5000 PPM/4 HR RAT INHALATION
1333-86-4	0.1-1.0	CARBON BLACK	3.5 MG/M3	>15,400 MG/KG RAT ORAL  >3,000 MG/KG RABBIT DERMAL	NOT AVAILABLE
13463-67-7	7-15	TITANIUM DIOXIDE	10 MG/M3	NOT AVAILABLE	NOT AVAILABLE
136-52-7	0.1-1.0	COBALT ALKANOATE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
22464-99-9	0.1-1.0	ZIRCONIUM DRIER	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
540-88-5	5-10	TERT-BUTYL ACETATE	200 PPM	4100 MG/KG RAT ORAL >2000 MG/KG	>2230 MG/M3/4H RAT INHALATION

				RABBIT DERMAL	
64742-95-6	5-10	LIGHT AROMATIC SOLVENT NAPHTHA (C8-C10)	NOT AVAILABLE	8400 MG/KG RAT ORAL	NOT AVAILABLE
68186-91-4	1-5	COPPER CHROMITE SPINEL	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
98-56-6	1-5	PARACHLOROBENZOTRIFLUORIDE	NOT AVAILABLE	13,000 MG/KG RAT ORAL 11,500 MG/KG MOUSE ORAL	22,000 MG/M3 RAT INHALATION 20,000 MG/M3 MOUSE INHALATION

### Section 2A: ADDITIONAL INGREDIENT INFORMATION

**Note:** (supplier).  
CAS# 136-52-7: TLV 0.02 mg/m3.  
CAS# 22464-99-9: TLV 10 mg/m3.

### Section 3: PHYSICAL DATA

**Physical state:** Liquid.

**Appearance & odor:** Pigmented.  
Aromatic solvent odour.

**Odor threshold (ppm):** Not available.

**Vapour pressure (mmHg):** 34 @ 25°C.

**Vapour density (air=1):** Not available.

**Volatiles (%)**

**By volume:** 55%

**Evaporation rate (butyl acetate = 1):** >1

**Boiling point (°C):** >208F (>98C).

**Freezing point (°C):** Not available.

**pH:** Not applicable.

**Specific gravity @ 20 °C:** 1.1-1.2.

**Solubility in water (%):** Insoluble.

**Coefficient of water\oil dist.:** Not available.

**VOC:** (material).  
372 g/l.

### Section 4: FIRE & EXPLOSION DATA

**Flammability:** Flammable.

**Conditions of flammability:** Vapours are heavier than air and may travel along the ground and be ignited by flames, sparks or other ignition sources at locations distant from the material handling point.  
Heat, sparks and open flames.  
May cause flash fire.

**Extinguishing media:** Dry chemical.  
Alcohol foam.  
Water fog.  
Carbon dioxide.

**Special procedures:** Self-contained breathing apparatus required.  
Firefighters should wear the usual protective gear.  
Use water spray to cool fire exposed containers.

**Auto-ignition temperature (°C):** Not available.

**Flash point (°C), method:** Tag Closed Cup.  
40F (4.4C).

**Lower flammability  
limit (% vol):** 1.26

**Upper flammability  
limit (% vol):** 6.88

#### Explosion Data

**Sensitivity to static discharge:** Take precautionary measures against static discharge.

**Sensitivity to mechanical impact:** Not available.

**Hazardous combustion products:** Oxides of carbon (CO, CO2).  
Acids  
Aldehydes.  
Toxic and irritating vapours.

**Explosive power:** Contact with oxidizers may cause fire or explosion.

### Section 5: REACTIVITY DATA

**Chemical stability:** Stable under normal conditions.

**Conditions of instability:** Explosive peroxides may form.

**Hazardous polymerization:** Will not occur.

**Incompatible substances:** Strong acids.  
Oxidizing agents.  
Perchlorates.  
Nitrates.  
Peroxides.  
Hypochlorites.  
Phosphorous.

**Hazardous decomposition  
products:** Oxides of carbon.

### Section 6: TOXICOLOGICAL PROPERTIES

**Route of entry:** Skin contact, eye contact, inhalation and ingestion.

#### Effects of acute exposure

**Eye contact:** May cause pain.  
Severe irritant.  
May cause swelling, redness and tearing.  
Reversible corneal damage.

**Skin contact:** Irritant.  
Pre-existing skin disorders may be aggravated by exposure.  
May be absorbed through the skin and produce effects similar to those caused by inhalation.

**Inhalation:** Nose and throat irritation.  
Harmful if inhaled.  
May cause narcosis.  
May cause loss of appetite.  
Irritant of the respiratory tract.  
May cause headache, dizziness and nausea.  
May cause fatigue.  
May cause tightness of the chest.  
May cause drying of throat.

**Ingestion:** May cause digestive tract irritation.  
May cause nausea, vomiting and diarrhea.  
May cause sore throat.  
Aspiration of liquid into lungs may cause chemical pneumonitis which can be fatal.  
May cause abdominal pain.  
Harmful or fatal if swallowed.

**Effects of chronic exposure:** May cause conjunctivitis.  
May cause liver and kidney damage.  
May cause defatting and dermatitis.  
Prolonged occupational overexposure to solvents may lead to permanent brain and nervous system damage.  
May cause blood damage.  
Allergies may be aggravated by this product.  
May cause drying and cracking of skin.  
May cause loss of memory, loss of intellectual ability and loss of coordination.

**LD50 of product, species & route:** > 11,400 mg/kg rat oral.  
>20,000 mg/kg rabbit dermal.

**LC50 of product, species & route:** Not available for mixture, see the ingredients section.

**Exposure limit of material:** Not available for mixture, see the ingredients section.

**Sensitization to product:** Sensitizer.

**Carcinogenic effects:** Ethylbenzene is classified as a possible carcinogen by IARC (group 2B).

**Reproductive effects:** May affect reproductive system.

**Teratogenicity:** May cause teratogenic effects.

**Mutagenicity:** None known.

**Synergistic materials:** None known.

## Section 7: PREVENTATIVE MEASURES

### Precautionary Measures

**Gloves/Type:**



Nitrile rubber gloves.

**Respiratory/Type:** None normally required.  
NIOSH approved respirator with organic vapor cartridge is required if ventilation is inadequate or exposure limits are exceeded.

**Eye/Type:**



Safety glasses or goggles.

**Footwear/Type:** Safety shoes per local regulations.

**Clothing/Type:** Wear adequate protective clothes.  
Long sleeve shirt, long trousers.

**Other/Type:** Eye wash facility should be in close proximity.  
Emergency shower should be in close proximity.

**Ventilation requirements:** Exhaust ventilation.  
To maintain exposure below TLV.

**Leak/Spill:** Eliminate all sources of ignition.  
Prevent entry into drains, sewers, and other waterways.  
Wear appropriate protective equipment.  
Ground handling equipment.  
Cover with absorbent material.  
Place in metal container.

**Waste disposal:** Dispose in accordance with local, provincial/state, and federal regulations.  
Incineration is the preferred method.

**Handling procedures and equipment:** Keep away from heat, sparks, and open flame.  
Avoid breathing vapors/mists.  
Use adequate ventilation.  
Wash thoroughly after handling.  
Empty containers containing residue may cause a hazard.  
Wear personal material safety protection.  
Use non-sparking tools.  
Use proper grounding procedures.  
Avoid contact with skin, eyes and clothing.  
Launder contaminated clothing prior to reuse.

**Storage requirements:** Store in a cool and well ventilated area.  
Keep out of direct sunlight.  
Keep away from heat, combustibles and reactive chemicals.  
Keep containers tightly closed.  
Avoid extreme temperatures.  
Store in a sprinklered warehouse.

**TDG classification:** PAINT  
UN1263  
Class 3  
PG III.



**Special shipping information:** See transportation information.

### Section 8: FIRST AID MEASURES

**Skin contact:** Remove contaminated clothing.  
Flush with large amounts of water, for at least 15 minutes.  
Seek medical attention if irritation persists.

**Eye contact:** Flush with water for at least 15 minutes.  
Obtain emergency medical attention.

**Inhalation:** Remove victim to fresh air. If not breathing, qualified personnel should administer artificial respiration. Get medical attention.

**Ingestion:** Never give anything by mouth to an unconscious person.  
Do not induce vomiting, seek immediate medical attention.  
Drink 3 to 4 glasses of water or milk.

**Additional information:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any inaccuracies.

<b>Section 9: ADDITIONAL INFORMATION</b>
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**General note:** This material safety data sheet was prepared from information obtained from various sources, including product suppliers and the Canadian Center for Occupational Health and Safety.

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