

MATERIAL SAFETY DATA SHEET

CE430  
05 00

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

| PRODUCT NUMBER | DATE OF PREPARATION | HMIS CODES                                  |
|----------------|---------------------|---|
| CE430          | 13-AUG-08           | Health 2*<br>Flammability 3<br>Reactivity 0 |

PRODUCT NAME  
Cross/FIRE® PLUS LCF Etching Primer

MANUFACTURER'S NAME  
MARTIN SENOUR PAINTS  
4440 Warrensville Center Road  
Warrensville Hts., OH 44128-2837

TELEPHONE NUMBERS and WEBSITES  
Regulatory Information  
(216) 566-2902  
Medical Emergency  
(216) 566-2917  
Transportation Emergency (800) 424-9300 for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)

Section 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

| % by WT | CAS No.   | INGREDIENT        | UNITS               | VAPOR PRESSURE |
|---------|-----------|-------------------|---------------------|----------------|
| 2       | 108-88-3  | Toluene           |                     |                |
|         |           | ACGIH TLV         | 20 ppm              | 22 mm          |
|         |           | OSHA PEL          | 100 ppm (Skin)      |                |
|         |           | OSHA PEL          | 150 ppm (Skin) STEL |                |
| 0.3     | 100-41-4  | Ethylbenzene      |                     |                |
|         |           | ACGIH TLV         | 100 ppm             | 7.1 mm         |
|         |           | ACGIH TLV         | 125 ppm STEL        |                |
|         |           | OSHA PEL          | 100 ppm             |                |
|         |           | OSHA PEL          | 125 ppm STEL        |                |
| 2       | 1330-20-7 | Xylene            |                     |                |
|         |           | ACGIH TLV         | 100 ppm             | 5.9 mm         |
|         |           | ACGIH TLV         | 150 ppm STEL        |                |
|         |           | OSHA PEL          | 100 ppm             |                |
|         |           | OSHA PEL          | 150 ppm STEL        |                |
| 18      | 67-63-0   | 2-Propanol        |                     |                |
|         |           | ACGIH TLV         | 200 ppm             | 33 mm          |
|         |           | ACGIH TLV         | 400 ppm STEL        |                |
|         |           | OSHA PEL          | 400 ppm             |                |
| 10      | 123-42-2  | Diacetone Alcohol |                     |                |
|         |           | ACGIH TLV         | 50 ppm              | 1.2 mm         |
|         |           | OSHA PEL          | 50 ppm              |                |
| 2       | 111-76-2  | 2-Butoxyethanol   |                     |                |
|         |           | ACGIH TLV         | 20 ppm              | 0.88 mm        |
|         |           | OSHA PEL          | 25 ppm              |                |

|     |            |                          |           |                             |          |
|-----|------------|--------------------------|-----------|-----------------------------|----------|
| 14  | 107-87-9   | Methyl n-Propyl Ketone   | ACGIH TLV | 150 ppm STEL                | 27.8 mm  |
|     |            |                          | OSHA PEL  | 200 ppm                     |          |
|     |            |                          | OSHA PEL  | 250 ppm STEL                |          |
| 3   | 108-10-1   | Methyl Isobutyl Ketone   | ACGIH TLV | 50 ppm                      | 16 mm    |
|     |            |                          | ACGIH TLV | 75 ppm STEL                 |          |
|     |            |                          | OSHA PEL  | 50 ppm                      |          |
|     |            |                          | OSHA PEL  | 75 ppm STEL                 |          |
| 5   | 110-43-0   | Methyl n-Amyl Ketone     | ACGIH TLV | 50 ppm                      | 3.855 mm |
|     |            |                          | OSHA PEL  | 100 ppm                     |          |
| 1   | 108-21-4   | Isopropyl Acetate        | ACGIH TLV | 250 ppm                     | 47.5 mm  |
|     |            |                          | ACGIH TLV | 310 ppm STEL                |          |
|     |            |                          | OSHA PEL  | 250 ppm                     |          |
|     |            |                          | OSHA PEL  | 310 ppm STEL                |          |
| 5   | 763-69-9   | Ethyl 3-Ethoxypropionate | ACGIH TLV | Not Available               | 1.11 mm  |
|     |            |                          | OSHA PEL  | Not Available               |          |
| 6   | 25068-38-6 | Epoxy Polymer            | ACGIH TLV | Not Available               |          |
|     |            |                          | OSHA PEL  | Not Available               |          |
| 1   | 1332-58-7  | Kaolin                   | ACGIH TLV | 2 mg/m3 as Resp. Dust       |          |
|     |            |                          | OSHA PEL  | 10 mg/m3 Total Dust         |          |
|     |            |                          | OSHA PEL  | 5 mg/m3 Respirable Fraction |          |
| 2   | 14807-96-6 | Talc                     | ACGIH TLV | 2 mg/m3 as Resp. Dust       |          |
|     |            |                          | OSHA PEL  | 2 mg/m3 as Resp. Dust       |          |
| 9   | 7727-43-7  | Barium Sulfate           | ACGIH TLV | 10 mg/m3 as Dust            |          |
|     |            |                          | OSHA PEL  | 10 mg/m3 Total Dust         |          |
|     |            |                          | OSHA PEL  | 5 mg/m3 Respirable Fraction |          |
| 3   | 13463-67-7 | Titanium Dioxide         | ACGIH TLV | 10 mg/m3 as Dust            |          |
|     |            |                          | OSHA PEL  | 10 mg/m3 Total Dust         |          |
|     |            |                          | OSHA PEL  | 5 mg/m3 Respirable Fraction |          |
| 0.1 | 1333-86-4  | Carbon Black             | ACGIH TLV | 3.5 mg/m3                   |          |
|     |            |                          | OSHA PEL  | 3.5 mg/m3                   |          |

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Section 3 -- HAZARDS IDENTIFICATION

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## Routes of Exposure

INHALATION of vapor or spray mist.

EYE or SKIN contact with the product, vapor or spray mist.

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EFFECTS OF OVEREXPOSURE

EYES: Irritation.

SKIN: Prolonged or repeated exposure may cause irritation.

INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the liver, urinary, blood forming, cardiovascular and reproductive systems.

## SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

## MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

May cause allergic skin reaction in susceptible persons or skin sensitization.

## CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

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## Section 4 -- FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes.  
Get medical attention.

SKIN: Wash affected area thoroughly with soap and water.  
If irritation persists or occurs later, get medical attention.

Remove contaminated clothing and launder before re-use.

INHALATION: If affected, remove from exposure. Restore breathing.  
Keep warm and quiet.

INGESTION: Do not induce vomiting.  
Get medical attention immediately.

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## Section 5 -- FIRE FIGHTING MEASURES

| FLASH POINT | LEL | UEL  |
|-------------|-----|------|
| 48 F SETA   | 1.0 | 12.7 |

## FLAMMABILITY CLASSIFICATION

RED LABEL -- Flammable, Flash below 100 F (38 C)

## EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

## UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.

Application to hot surfaces requires special precautions.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

## SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

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Section 6 -- ACCIDENTAL RELEASE MEASURES

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.  
Remove with inert absorbent.

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Section 7 -- HANDLING AND STORAGE

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STORAGE CATEGORY

DOL Storage Class IB

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are FLAMMABLE. Keep away from heat, sparks, and open flame.  
During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.  
Consult NFPA Code. Use approved Bonding and Grounding procedures.  
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

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Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION

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PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.  
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.  
Wash hands after using.  
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m<sup>3</sup> (total dust), 3 mg/m<sup>3</sup> (respirable fraction), OSHA PEL 15 mg/m<sup>3</sup> (total dust), 5 mg/m<sup>3</sup> (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.  
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PROTECTIVE EQUIPMENT

Use of barrier cream on exposed skin is recommended.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

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 Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES
 

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|  |                   |  |
|--|-------------------|--|
| PRODUCT WEIGHT   | 8.72 lb/gal       | 1045 g/l                                 |
| SPECIFIC GRAVITY   | 1.05              |  |
| BOILING POINT  | 178 - 343 F       | 81 - 172 C                               |
| MELTING POINT  | Not Available     |  |
| VOLATILE VOLUME  | 78 %              |  |
| EVAPORATION RATE   | Slower than ether |  |
| VAPOR DENSITY  | Heavier than air  |  |
| SOLUBILITY IN WATER  | N.A.              |  |
| VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged) |                   |  |
| 5.43 lb/gal  | 651 g/l           | Less Water and Federally Exempt Solvents |
| 5.43 lb/gal  | 651 g/l           | Emitted VOC                              |

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 Section 10 -- STABILITY AND REACTIVITY
 

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STABILITY -- Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

 Will not occur
 

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 Section 11 -- TOXICOLOGICAL INFORMATION
 

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CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

Carbon Black is classified by IARC as possibly carcinogenic to humans (group 2B) based on experimental animal data, however, there is insufficient evidence in humans for its carcinogenicity.

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 TOXICOLOGY DATA
 

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| CAS No.    | Ingredient Name          |      |     |     |               |       |
|------------|--------------------------|------|-----|-----|---------------|-------|
| 108-88-3   | Toluene                  | LC50 | RAT | 4HR | 4000          | ppm   |
|            |                          | LD50 | RAT |     | 5000          | mg/kg |
| 100-41-4   | Ethylbenzene             | LC50 | RAT | 4HR | Not Available |       |
|            |                          | LD50 | RAT |     | 3500          | mg/kg |
| 1330-20-7  | Xylene                   | LC50 | RAT | 4HR | 5000          | ppm   |
|            |                          | LD50 | RAT |     | 4300          | mg/kg |
| 67-63-0    | 2-Propanol               | LC50 | RAT | 4HR | Not Available |       |
|            |                          | LD50 | RAT |     | 5045          | mg/kg |
| 123-42-2   | Diacetone Alcohol        | LC50 | RAT | 4HR | Not Available |       |
|            |                          | LD50 | RAT |     | 4000.         | mg/kg |
| 111-76-2   | 2-Butoxyethanol          | LC50 | RAT | 4HR | Not Available |       |
|            |                          | LD50 | RAT |     | 470           | mg/kg |
| 107-87-9   | Methyl n-Propyl Ketone   | LC50 | RAT | 4HR | Not Available |       |
|            |                          | LD50 | RAT |     | 1600          | mg/kg |
| 108-10-1   | Methyl Isobutyl Ketone   | LC50 | RAT | 4HR | Not Available |       |
|            |                          | LD50 | RAT |     | 2080          | mg/kg |
| 110-43-0   | Methyl n-Amyl Ketone     | LC50 | RAT | 4HR | Not Available |       |
|            |                          | LD50 | RAT |     | 1670          | mg/kg |
| 108-21-4   | Isopropyl Acetate        | LC50 | RAT | 4HR | Not Available |       |
|            |                          | LD50 | RAT |     | 3000          | mg/kg |
| 763-69-9   | Ethyl 3-Ethoxypropionate | LC50 | RAT | 4HR | Not Available |       |
|            |                          | LD50 | RAT |     | 5000          | mg/kg |
| 25068-38-6 | Epoxy Polymer            | LC50 | RAT | 4HR | Not Available |       |
|            |                          | LD50 | RAT |     | Not Available |       |
| 1332-58-7  | Kaolin                   | LC50 | RAT | 4HR | Not Available |       |
|            |                          | LD50 | RAT |     | Not Available |       |
| 14807-96-6 | Talc                     | LC50 | RAT | 4HR | Not Available |       |
|            |                          | LD50 | RAT |     | Not Available |       |
| 7727-43-7  | Barium Sulfate           | LC50 | RAT | 4HR | Not Available |       |
|            |                          | LD50 | RAT |     | Not Available |       |
| 13463-67-7 | Titanium Dioxide         | LC50 | RAT | 4HR | Not Available |       |
|            |                          | LD50 | RAT |     | Not Available |       |
| 1333-86-4  | Carbon Black             | LC50 | RAT | 4HR | Not Available |       |
|            |                          | LD50 | RAT |     | Not Available |       |

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 Section 12 -- ECOLOGICAL INFORMATION
 

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## ECOTOXICOLOGICAL INFORMATION

No data available.

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 Section 13 -- DISPOSAL CONSIDERATIONS
 

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## WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

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 Section 14 -- TRANSPORT INFORMATION
 

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## US Ground (DOT)

1 Gallon and Less may be Classed as CONSUMER COMMODITY, ORM-D  
 Larger Containers are Regulated as:  
 UN1263, PAINT, 3, PG II, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities  
 Xylenes (isomers and mixture) 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):  
 UN1263, PAINT, 3, PG II, (ERG#128)

## Canada (TDG)

UN1263, PAINT, CLASS 3, PG II, (ERG#128)

## IMO

UN1263, PAINT, CLASS 3, PG II, (9 C c.c.), EmS F-E, S-E

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 Section 15 -- REGULATORY INFORMATION
 

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## SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

| CAS No.   | CHEMICAL/COMPOUND      | % by WT | % Element |
|-----------|------------------------|---------|-----------|
| 108-88-3  | Toluene                | 2       |           |
| 100-41-4  | Ethylbenzene           | 0.2     |           |
| 1330-20-7 | Xylene                 | 2       |           |
| 108-10-1  | Methyl Isobutyl Ketone | 3       |           |
|           | Zinc Compound          | 3       | 0.9       |
|           | Glycol Ethers          | 2       |           |

## CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

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**TSCA CERTIFICATION**

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

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**Section 16 -- OTHER INFORMATION**

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This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.