

# MATERIAL SAFETY DATA SHEET

MSA-575  
09 00

## Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER	DATE OF PREPARATION	HMIS CODES
MSA-575	13-AUG-08	Health 3* Flammability 3 Reactivity 1

PRODUCT NAME  
MSA® Acrylic Enamel Hardener

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      for Chemical Emergency ONLY (spill, leak,  
(800) 424-9300                      fire, exposure, or accident)

## Section 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

% by WT	CAS No.	INGREDIENT	UNITS	VAPOR PRESSURE
2	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	
9	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	
2	64742-95-6	Light Aromatic Hydrocarbons		
		ACGIH TLV	Not Available	3.8 mm
		OSHA PEL	Not Available	
3	108-67-8	1,3,5-Trimethylbenzene		
		ACGIH TLV	25 ppm	2 mm
		OSHA PEL	25 ppm	
5	95-63-6	1,2,4-Trimethylbenzene		
		ACGIH TLV	25 ppm	2.03 mm
		OSHA PEL	25 ppm	
18	123-86-4	n-Butyl Acetate		
		ACGIH TLV	150 ppm	10 mm
		ACGIH TLV	200 ppm STEL	
		OSHA PEL	150 ppm	
		OSHA PEL	200 ppm STEL	

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0.3	4098-71-9	Isophorone Diisocyanate (max.)	ACGIH TLV	0.005	ppm (Skin)
			OSHA PEL	0.005	ppm (Skin)
			OSHA PEL	0.02	ppm (Skin) STEL
20	28182-81-2	Hexamethylene Diisocyanate Polymer	ACGIH TLV	Not Available	
			OSHA PEL	Not Available	
40	Proprietary	Isophorone Diisocyanate Polymer	ACGIH TLV	Not Available	
			OSHA PEL	Not Available	

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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.

#### 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 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 respiratory and/or skin reaction in susceptible persons or sensitization. This effect may be delayed several hours after exposure.

Persons sensitive to isocyanates will experience increased allergic reaction on repeated exposure.

#### CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

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### Section 4 -- FIRST AID MEASURES

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

SKIN: Wash affected area thoroughly with soap and water.  
Remove contaminated clothing and launder before re-use.

INHALATION: If any breathing problems occur during use, LEAVE THE AREA and get fresh air. If problems remain or occur later, IMMEDIATELY get medical attention.

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

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Section 5 -- FIRE FIGHTING MEASURES

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FLASH POINT	LEL	UEL
78 F TCC	0.7	7.6

## 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.

All personnel in the area should be protected as in Section 8.

Cover spill with absorbent material. Deactivate spilled material with a 10% ammonium hydroxide solution (household ammonia). After 10 minutes, collect in open containers and add more ammonia. Cover loosely. Wash spill area with soap and water.

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Section 7 -- HANDLING AND STORAGE

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## STORAGE CATEGORY

DOL Storage Class IC

## 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

NO PERSON SHOULD USE THIS PRODUCT, OR BE IN THE AREA WHERE IT IS BEING USED, IF THEY HAVE CHRONIC (LONG-TERM) LUNG OR BREATHING PROBLEMS OR IF THEY EVER HAD A REACTION TO ISOCYANATES.

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

Where overspray is present, a positive pressure air supplied respirator (TC19C NIOSH/MSHA approved) should be worn. If unavailable, a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2 may be effective. Follow respirator manufacturer's directions for use. Wear the respirator for the whole time of spraying and until all vapors and mists are gone. NO PERSONS SHOULD BE ALLOWED IN THE AREA WHERE THIS PRODUCT IS BEING USED UNLESS EQUIPPED WITH THE SAME RESPIRATOR PROTECTION RECOMMENDED FOR THE PAINTERS.

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

To prevent skin contact, 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 barrier cream on exposed skin.

## OTHER PRECAUTIONS

This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.

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	8.54 lb/gal	1023 g/l
SPECIFIC GRAVITY	1.03	
BOILING POINT	255 - 360 F	123 - 182 C
MELTING POINT	Not Available	
VOLATILE VOLUME	47 %	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	N.A.	

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VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

3.41 lb/gal	409 g/l	Less Water and Federally Exempt Solvents
3.41 lb/gal	409 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

Contamination with Water, Alcohols, Amines and other compounds which react with isocyanates, may result in dangerous pressure in, and possible bursting of, closed containers.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen, possibility of Hydrogen Cyanide

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.

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TOXICOLOGY DATA

CAS No.	Ingredient Name				
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
64742-95-6	Light Aromatic Hydrocarbons	LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available
108-67-8	1,3,5-Trimethylbenzene	LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available
95-63-6	1,2,4-Trimethylbenzene	LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available
123-86-4	n-Butyl Acetate	LC50	RAT	4HR	2000 ppm
		LD50	RAT		13100 mg/kg
4098-71-9	Isophorone Diisocyanate (max.)	LC50	RAT	4HR	Not Available
		LD50	RAT		2500. mg/kg
28182-81-2	Hexamethylene Diisocyanate Polymer	LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available
Proprietary	Isophorone Diisocyanate Polymer	LC50	RAT	4HR	Not Available
		LD50	RAT		4825 mg/kg

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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 RELATED MATERIAL, 3, PG III, (ERG#128)

## DOT (Dept of Transportation) Hazardous Substances &amp; Reportable Quantities

n-Butyl acetate 5000 lb RQ  
Xylenes (isomers and mixture) 100 lb RQ

## Bulk Containers may be Shipped as (check reportable quantities):

RQ, UN1263, PAINT RELATED MATERIAL, 3, PG III, (XYLENES (ISOMERS AND MIXTURE)), (ERG#128)

## Canada (TDG)

UN1263, PAINT RELATED MATERIAL, CLASS 3, PG III, LIMITED QUANTITY,  
(ERG#128)

## IMO

UN1263, PAINT RELATED MATERIAL, CLASS 3, PG III, (26 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
100-41-4	Ethylbenzene	2	
1330-20-7	Xylene	9	
95-63-6	1,2,4-Trimethylbenzene	5	

## CALIFORNIA PROPOSITION 65

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

## 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.