



1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Name: MS-452N
Protective Varnish

Product Use: Varnish Protective Coating

MANUFACTURER/DISTRIBUTOR:

Miller-Stephenson Chemical
55 Backus Ave.
Danbury, Conn. 06810 USA
(203) 743-4447

Emergency Phone Number:
(800) 424-9300

2. HAZARDS IDENTIFICATION

Hazard classification

Acute toxicity (Dermal): Category 4
Acute toxicity (Inhalation: dust/mists): Category 4
Skin corrosion/irritation: Category 2
Skin sensitization: Category 1
Germ cell mutagenicity: Category 1B
Carcinogenicity: Category 1B
Specific Target Organ Toxicity (repeated exposure): Category 2
Aspiration toxicity: Category 1
Flammable liquids: Category 3

Label elements:

Signal word
Danger

Pictograms



Hazard Statements

Harmful in contact with skin.
Harmful if inhaled.
Causes skin irritation.
May cause an allergic skin reaction.
May cause cancer.

May cause damage to organs through prolonged or repeated exposure.
May be fatal if swallowed and enters airways.
Flammable liquid and vapor.

Precautionary Statements

Handle after all safety precautions have been read and understood.
Avoid breathing mist/vapors/spray.
Wash skin thoroughly after handling.
Use personal protective equipment as required.
Wear protective gloves.
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
IF exposed or concerned: Get medical advice/attention.
Call a POISON CENTER or doctor/ physician if you feel unwell.
Take off contaminated clothing and wash before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
IF ON SKIN (of hair): Remove immediately contaminated clothing. Rinse skin with water/shower.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
Do NOT induce vomiting.
In case of fire: Use CO₂, dry chemical, or foam for extinction.
Store in a well-ventilated, cool place. Keep container tightly closed.
Dispose of contents/ container in accordance with local, regional, national regulations.

3. INGREDIENTS

<u>Material (s)</u>	<u>CAS No.</u>	<u>Approximate %</u>
Xylene	1330-20-7	30 – 60
Ethyl benzene	100-41-4	10 – 30
Methyl Ethyl Ketoxime	96-29-7	0.1 – 1.0
Benzoyl Tributyl Stannane	4342-36-3	0.1 – 1.0
Stoddard Solvent	8052-41-3	0.1 – 1.0

4. FIRST AID MEASURES

Inhalation: Remove to fresh air.

Eye: Immediately flush eyes with plenty of water for at least 15 mins., lifting lower and upper eyelids. Consult a physician.

Skin: Immediately wash skin with plenty of water and soap.

Oral: Clean mouth with water and drink afterwards plenty of water. If swallowed, call a physician or poison control center immediately.

Notes to Physician: Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES

Flash Point: 81°F/27°C

Autoignition Temperature: Not Determined

Flammable Limits in Air, % by Vol.: Upper limit: 7%
Lower limit: 1%

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: Use of water spray when fighting fire may be inefficient.

Special hazards: The product is flammable. Closed containers may rupture when exposed to extreme heat. Vapor can travel to a source of ignition such as spark or flame and flash back. Hazardous combustion byproducts are oxides of carbon and oxides of nitrogen.

Special Fire Fighting Instruction: Wear self-contained breathing apparatus pressure-demand, NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Spill Cleanup Measures: Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Absorb spill with dry inert material (e.g. dry sand or earth), then place in chemical waste container.

Environmental Precautions: Contain liquid to prevent contamination of soil, surface water or ground water. Avoid runoff into storm sewers and ditches, which lead to waterways. Do not flush to sewer.

Spill/Release Reporting: Immediately notify authorities of any reportable spill as may be required pursuant to regulations. Prevent further leakage or spillage, if safe to do so.

7. HANDLING AND STORAGE

Handling: Handle in accordance with good industrial hygiene and safety practice.

Storage Conditions: Store in cool, dry, well ventilated areas away from sources of heat and incompatible substances. Keep containers tightly closed when not in use.

Hygiene Practices:

Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor and mists.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>Exposure Limits:</u>	<u>TLV (ACGIH)</u>	<u>PEL (OSHA)</u>
Xylene	100 ppm (TWA)	100 ppm (TWA)
Ethyl Benzene	20 ppm (TWA)	100 ppm (TWA)
Methyl Ethyl Ketoxime	Not Established	Not Established
Benzoyl Tributyl Stannane	0.1 mg/m ³ Sn	0.1 mg/m ³ Sn
Stoddard Solvent	100 ppm (TWA)	500 ppm (TWA)

Engineering Controls: Exhaust ventilation. Showers. Eyewash stations. Use in a well ventilated area.

Individual protection measures, such as personal protective equipment:

Recommend evaluation and selection of appropriate engineering controls (such as ventilation and eyewash/safety shower) as well as appropriate personal protective equipment (such as respiratory protection, protective gloves, eye protection) for safely handling this material. The following guidelines should be considered in this process.

Respiratory Protection: Use only in a well ventilated area. Use localized mechanical ventilation. Use approved NIOSH respiratory protection if TLV exceeded, or over exposure is likely.

Eye Protection: Wear appropriate protective glasses or splash goggles. Face shield.

Skin Protection: Avoid contact with skin. Use chemically resistant gloves like, polyvinyl alcohol gloves. Wear suitable protective clothing to prevent contact with skin.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: N.A.

Percent Volatile by Volume: 58 – 62%

Specific Gravity: 0.92-0.96

Vapor Pressure: N.A.

Vapor Density (Air=1): N.A.,

Solubility in H₂O: Negligible

pH Information: N.A.

Evaporation Rate (CC14=1): N.A.

Form: Liquid

Appearance: Amber Liquid

Color: Amber

Odor: Aromatic

10. STABILITY AND REACTIVITY

Reactivity: No data available.

Chemical stability: Stable under normal ambient conditions.

Possibility of hazardous reactions: Hazardous polymerization will not occur under normal conditions.

Material and Conditions to Avoid: Keep away from heat, sparks and flame. Avoid contact with acidic, basic and oxidizing agents.

Decomposition: Carbon oxides (CO, CO₂). Silicon dioxide. Toxic fumes. Oxides of nitrogen. Ethanol.

11. TOXICOLOGICAL INFORMATION

Ethyl Benzene

Oral: LD50: 3500 mg/kg in rats

Dermal: LD50: 15400 mg/kg in rabbits

Inhalation: 4 hour LC50: 17.2 mg/l in rats

Xylene

Oral: LD50: 3500 mg/kg in rats

Dermal: LD50: > 1700 mg/kg in rabbits

Inhalation: 4 hour LC50: 29.08 mg/l in rats, 5000 ppm in rats

Methyl Ethyl Ketoxime

Oral: LD50: 930 mg/kg in rats

Dermal: LD50: 0.2 mg/kg in rabbits

Inhalation: 4 hour LC50: 20 mg/l in rats

Benzoyl Tributyl Stannane

Oral: LD50: 132 mg/kg in rats

Dermal: LD50: 503 mg/kg in rats

Information on toxicological effects:

Symptoms: No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization: No information available

Germ cell mutagenicity: No information available

Carcinogenicity: Ethyl benzene is considered a carcinogen, according to OSHA, a Group 2B carcinogen, according to IARC and an A3 carcinogen, according to ACGIH. Xylene is considered a Group 3 carcinogen, according to IARC.

Reproductive toxicity: No information available

Specific Toxic Organ Toxicity – single exposure: No information available

Aspiration hazard: No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Xylene

96 hour LC50 flow-through in *Lepomis macrochirus*: 13.1 – 16.5 mg/l
96 hour LC50 in *Oncorhynchus mykiss*: 13.5 – 17.3 mg/l
96 hour LC50 static in *Oncorhynchus mykiss*: 2.661 - 4.093 mg/l
96 hour LC50 static in *Pimephales promelas*: 23.53 – 29.97 mg/l
96 hour LC50 in *Lepomis macrochirus*: 19 mg/l
96 hour LC50 in *Cyprinus carpio*: 780 mg/l
48 hour EC50 in water flea: 3.82 mg/l
72 hour EC50 in *Pseudokirchneriella subcapitata*: 11 mg/l

Ethyl Benzene

96 hour LC50 static in *Oncorhynchus mykiss*: 11.0 – 18.0 mg/l
96 hour LC50 flow-through in *Pimephales promelas*: 7.55 – 11 mg/l
96 hour LC50 static in *Pimephales promelas*: 9.1 – 15.6 mg/l
96 hour LC50 static in *Lepomis macrochirus*: 32 mg/l
48 hour EC50 in *Daphnia magna*: 1.8 – 2.4 mg/l
72 hour EC50 in *Pseudokirchneriella subcapitata*: 4.6 mg/l
96 hour EC50 in *Pseudokirchneriella subcapitata*: 438 mg/l

Methyl Ethyl Ketoxime

96 hour LC50 static in *Leuciscus idus*: 320 – 1000 mg/l
96 hour LC50 flow-through in *Pimephales promelas*: 777 – 914 mg/l
96 hour LC50 static in *Poecilia reticulata*: 760 mg/l
48 hour EC50 in *Daphnia magna*: 750 mg/l
72 hour EC50 in *Desmodesmus subspicatus*: 83 mg/l

13. DISPOSAL CONSIDERATIONS

Comply with federal, state and local regulations. Arrange disposal by a licensed disposal company.

14. TRANSPORT INFORMATION

U.S. DOT

Proper Shipping Name: Paint

Hazard Class: 3

UN#: 1263

Packing Group: III

IATA

Proper Shipping Name: Paint

Hazard Class: 3

UN#: 1263

Packing Group: III

IMDG

Proper Shipping Name: Paint

Hazard Class: 3

UN#: 1263

Packing Group: III

15. REGULATORY INFORMATION

TSCA: All ingredients are listed in TSCA inventory.

State Regulations (U.S.)

California Proposition 65: This product contains chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm.

16. OTHER INFORMATION

NPCA-HMIS Ratings:

Health - 2

Flammability - 3

Reactivity - 0

Personal Protective rating to be supplied by user depending on the conditions.

FOR INDUSTRIAL USE ONLY

REVISION DATE: JUNE 2015

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user.