



1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Name: MS-115
Conformal Coating Stripper

Product Use: Conformal Coating Stripper

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 (Oral): Category 4
Skin Irritation: Category 2
Serious eye damage: Category 1
Reproductive toxicity: Category 1B
Specific Target Organ Toxicity (single exposure): Category 3 (Central nervous system, Respiratory system)

Label elements:

Signal word
Danger

Pictograms



Hazard Statements

Harmful if swallowed.
Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.
May damage fertility or the unborn child.
May cause drowsiness or dizziness.

Precautionary Statements

Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Avoid breathing mist/vapors/spray.
Wash skin thoroughly after handling.
Do not eat, drink, or smoke when using this product.
Use in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
IF ON SKIN: Wash with plenty of soap and water. If irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
If eye irritation persists: Get medical attention.
If exposed or concerned: Call a poison center/doctor.
Store in a well-ventilated place. Keep container tightly closed. Keep cool.
Dispose of contents/ container in accordance with local, regional, national, and international regulations.

3. INGREDIENTS

<u>Material (s)</u>	<u>CAS No.</u>	<u>Approximate %</u>
Butyrolactone	96-48-0	48 – 52
N-Methyl-2-Pyrrolidone	872-50-4	48 – 52

4. FIRST AID MEASURES

Inhalation: Remove patient to fresh air. Keep patient warm and at rest. If unconscious place in recovery position and seek medical advice. Call a physician, if symptoms persist.

Eye: Flush with large amounts of water for at least 15 minutes, lifting eyelids until no evidence of the chemical remains. Get medical attention. Remove contact lenses, if present and easy to do. Continue to rinse. Protect unharmed eye.

Skin: Wash skin with plenty of water for at least 15 minutes. Wash contaminated clothing before use. Get medical attention if necessary.

Oral: Do NOT induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms/effects, acute and delayed: Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin include: effects of blood pressure, stomach and intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways) and confusion. Harmful if swallowed. Causes serious eye damage. Causes skin irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May damage fertility or the unborn child.

5. FIRE FIGHTING MEASURES

Flammability: This product is not flammable. Does not flash using TCC.

Suitable Extinguishing Media: Water spray, Foam, Dry chemical, Carbon dioxide (CO₂)

Unsuitable extinguishing media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special hazards: The product is not flammable but may support combustion at high temperatures. Gas/vapor are heavier than air. May accumulate in confined spaces, and travel along the ground level and can be ignited by heat, pilot lights, other flames and ignition sources at the location near the release.

Hazardous combustion products: Carbon dioxide and carbon monoxide, Hydrocarbons, nitrogen oxides, toxic fumes.

Special Fire Fighting Instruction: Do not enter area without personal protective equipment. Exposure to decomposition products may be a hazard to health. Wear self-contained breathing apparatus, if necessary. Use water spray for cooling exposed containers. Do not allow run-off from fire-fighting to enter drains or water sources. Contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel): Evacuate personnel to safe area. Ventilate area, especially low or enclosed places where heavy vapors might collect. In case of insufficient ventilation, wear suitable respiratory equipment. Use appropriate personal protection equipment.

Environmental precautions: Prevent material from entering sewers, waterways, or low areas. Should not be released into the environment.

Spill Cleanup: Contain spillage, and then collect with inert material, (e.g. sand, earth, diatomaceous earth, vermiculite, universal binder, sawdust) and place in container for disposal according to local / national regulations

7. HANDLING AND STORAGE

Handling: Avoid exposure. Use in a well-ventilated area to avoid breathing vapors. Use appropriate respiratory protection when ventilation is inadequate. When using do not eat, drink, or smoke. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Container is hazardous when empty.

Storage Conditions: Store tightly sealed in a clean, dry, and well ventilated place. Electrical installations/working materials must comply with the technological safety standards. Do not store in temperatures that exceed 125°F/52°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>Exposure Limits:</u>	<u>STEL(ACGIH)</u>	<u>TWA (WEEL)</u>
Butyrolactone	Not Established	Not Established
N-Methyl-2-Pyrrolidone	Not Established	10 ppm

Respiratory Protection: Avoid breathing vapors, mists or spray. Use with sufficient ventilation. Use NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed limits or if overexposure has otherwise been determined. In poorly ventilated areas, use an approved self-contained breathing apparatus.

Eye Protection: Avoid eye contact. Use chemical goggles or safety glasses with side shields.

Skin Protection: Avoid contact with skin. Use gloves/protective clothing that are impervious to this material when contact occurs.

Prevention of Swallowing: Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 397°F/203°C

Percent Volatile by Volume: 100%

Density: 1.08 g/cc at 77°F/25°C

Vapor Pressure: N.A.

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

Solubility in H₂O : Miscible in Water

pH Information: 6.0

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

Form: Liquid

Appearance: Clear

Color: Colorless

Odor: Mild Amine-like

10. STABILITY AND REACTIVITY

Reactivity: No decomposition if stored and applied as directed.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Material and Conditions to Avoid: Heat, flames, and sparks. Exposure to moisture and light. Reducing agents, Strong acids, Strong bases and Strong oxidizing agents.

Decomposition: This product can be decomposed by high temperatures (flame, glowing metal surfaces, etc.) forming Carbon oxides (CO, CO₂), Hydrocarbons, and Nitrogen compounds.

11. TOXICOLOGICAL INFORMATION

N-Methyl-2-Pyrrolidone

Acute Toxicity:

Oral: LD50: 4,150 mg/kg in rats

Dermal: LD50: 8,000 mg/kg in rabbits

Inhalation: 4 hours LC50: >5.1 mg/l in rats

Skin: May cause skin irritation and/or dermatitis. Repeated exposure may cause skin dryness and cracking. Not a sensitizer.

Eye: Causes serious eye irritation. Irritation to eyes, reversing 7 to 21 days.

Mutagenicity: Non-mutagenic in various in-vitro and in-vivo assays.

Carcinogenicity: Not classified based on available information.

Reproductive Toxicity: May damage fertility or the unborn child. Clear evidence of adverse effects on sexual function and fertility, and/or on development based on animal experiments.

Specific Target Organ Toxicity – single exposure: Nose: Inhalation: May cause respiratory irritation.

Specific Target Organ Toxicity – repeated exposure: Not classified based on available information.

No observed adverse effect level: 169 mg/kg in rats by ingestion for 90 days.

No observed adverse effect level: 0.5 mg/l in rats by inhalation for 90 days,

No observed adverse effect level: 826 mg/kg by skin contact for 28 days.

Aspiration toxicity: Not classified based on available information.

Butyrolactone

Acute Toxicity:

Oral: LD50: 1,582 mg/kg in rats

Dermal: LD50: > 5 g/kg in guinea pigs

Inhalation: 4 hour LC50: > 5.1 mg/l in rats (dust/mist)

Skin: Not irritating to the skin. Not classified as a skin sensitizer.

Eye: Causes serious eye damage. May cause irreversible eye damage. Corrosive to eyes.

Respiratory: Not classified as a sensitizer.

Genotoxicity in vitro: Ames test: Result: Negative

Chromosome aberration in vitro: Result: Negative

Genotoxicity in vivo: In vivo micronucleus test

Test species: mouse

Result: Negative

Carcinogenicity: Not classified based on available information.

Reproductive Toxicity: Not classified based on available information.

Specific Target Organ Toxicity – single exposure: May cause drowsiness and dizziness.

Specific Target Organ Toxicity – repeated exposure: Not classified based on available information.

Aspiration toxicity: Not classified based on available information.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity:

N-Methyl-2-Pyrrolidone

96 hour LC50 – Bluegill sunfish (*Lepomis macrochirus*): 832 mg/l

24 hour EC50 – Water flea (*Daphnia magna*): > 1000 mg/l

72 hour EC50 – Green algae (*Desmodesmus subspicatus*): 600 mg/l

EC10 (activated sludge): 100 mg/l

Butyrolactone

96 hour LC50 (static test) – Bluegill sunfish (*Lepomis macrochirus*): 56 mg/l

48 hour EC50 – Water flea (*Daphnia magna*): > 500 mg/l

ErC50 – Green algae (*Desmodesmus subspicatus*): > 1000 mg/l

EC10 – Green algae (*Desmodesmus subspicatus*): 84.4 mg/l

13. DISPOSAL CONSIDERATIONS

Comply with federal, state and local regulations. Remove to a permitted waste disposal facility.

14. TRANSPORT INFORMATION

U.S. DOT

Not Regulated

IATA

Not Regulated

IMDG

Not Regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations

TSCA: All ingredients are listed in TSCA inventory.

SARA 313 Regulated Chemicals: N-Methyl-2-Pyrrolidone

State Regulations (U.S.)

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

REACH (E.U.)

N-Methyl-2-Pyrrolidone is an SVHC. It is considered to be toxic for reproduction.

16. OTHER INFORMATION

NPCA-HMIS Ratings:

Health - 2

Flammability - 2

Reactivity - 0

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

FOR INDUSTRIAL USE ONLY

REVISION DATE: JULY 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.