

SAFETY DATA SHEET

Metzger/McGuire Co.

Solvent

1. Identification

1.1 Product Name: M-Flush

1.2 Recommended Use: Solvent cleaner for Polyurea/Polyurethane resins

Issue Date: 7/31/15

Supersedes: 8/14/13

Reason for revision: Information update

1.3 Manufacturer:

Metzger/McGuire Co.
PO BOX 2217
CONCORD, NH 03302-2217
PH: (800) 223-6680
FAX: (603) 224-6020
Email: info@metzgermcguire.com

1.4 In Case of Emergency: (800) 255-3924 24 hrs. (Continental U.S.)
(813) 248-0585 24 hrs. (Outside Continental U.S.)

2. Hazards Identification

2.1 GHS Classification:

Flammable Liquids	Category 4
Eye irritation	Category 2A
Reproductive toxicity	Category 1B
Specific target organ systemic toxicity- single exposure, Inhalation, Respiratory system, Central nervous system	Category 3

GHS Classification Scale (1= severe hazard; 4= slight hazard)

2.2 Label Elements

Hazard symbols:



Signal word: Danger

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2.3 Hazard statements:

- H227 Combustible liquid.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H360D May damage the unborn child.

2.4 Precautionary statements:

Prevention

- P201 Obtain special instructions before use.
- P210 Avoid heat, hot surfaces, sparks and open flames. No smoking.
- P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
- P264 Wash hands thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

2.5 Response

- P370 + P378 For fire: Use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.
- P305 + P351 + P338 If in eyes, Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313 If eye irritation persists: get medical advice/attention.
- P304 + P340 If inhaled: Give victim fresh air and maintain a position comfortable for breathing.
- P312 Call a poison center or doctor/ physician if you feel unwell.
- P308 + P313 If exposed or concerned: Get medical advice/attention.

2.6 Storage

- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
- P235 Keep cool.

3. Composition/Information on Ingredients

	<u>CAS number</u>	<u>EC-No.</u>
3.1 Chemical name N-Methyl Pyrrolidone	872-50-4	212-828-1

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4. First Aid Measures

4.1 Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of running tepid water for 15 minutes, occasionally lifting the upper and lower eyelids. If effects occur get medical attention as appropriate.

Skin contact: Readily absorbed through the skin. Wash immediately with warm soapy water. Get medical attention if irritation develops. Wash clothing or personal items before re-use and discard items that cannot be decontaminated.

Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen clothing such as collar, tie, belt or waistband.

Ingestion: Possible lung aspiration hazard if swallowed. If victim is conscious, drink water to dilute. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately. **Notes to physician:** No specific treatment. Treat symptomatically.

4.2 Symptoms of exposure:

Eye contact: Irritation and redness, pain.

Skin contact: Irritation, redness, itching.

Inhalation: Dizziness, difficulty breathing if fumes are highly concentrated.

Ingestion: Lung aspiration hazard. May cause irritation.

5. Fire-Fighting Measures

NFPA Flammable classification: Combustible liquid IIIA

Flash point: 196F (91C) Closed Cup

5.1 Extinguishing Media

Suitable: Water fog, carbon dioxide, foam, dry chemical.

Not Suitable: Do not use solid stream of water.

5.2 Special hazards: Combustion products may include: carbon monoxide, carbon dioxide. Releases flammable vapors when heated above the flash point.

5.3 Special protective actions for fire fighters: Use protective fire fighting clothing and positive pressure self-contained breathing apparatus (SCBA) to protect against potential harmful and/or irritating fumes. Do not use high volume water jet as this may spread the area of the fire. Vapors may be heavier than air.

6. Accidental Release Measures

6.1 Personal precautions: Eliminate all sources of ignition. Isolate area; keep unnecessary and unprotected personnel away from spill area. Avoid contact with skin, eyes and clothing. Use appropriate safety equipment.

6.2 Environmental precautions: Avoid disposal of spilled material and runoff and contact with soil, waterways, drains and sewers.

6.3 Methods for cleaning up: Combustible liquid. Contain and absorb large spills with an inert, non-flammable absorbent carrier (such as earth, sand or clay). Shovel into labeled open-top drums or plastic bags for further decontamination if necessary. Wash the spillage area clean with liquid decontaminant. (See section 13 for disposal considerations). Notify applicable government authorities if release is reportable.

7. Handling and Storage

7.1 Precautions for safe handling: Avoid personal contact with the product. Use only with adequate ventilation to ensure that the occupational exposure limit is not exceeded. Regularly monitor the efficiency of the ventilation system. Avoid breathing aerosols, mists and vapors. (See section 8 Exposure control for details).

7.2 Storage: Store in tightly closed steel containers in a cool, dry well ventilated area.

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8. Exposure Controls/Personal Protection

8.1 Exposure parameters: None established.

8.2 Engineering controls: Ventilation through local exhaust if appropriate.

Eye/face protection: Safety glasses, goggles, face mask as appropriate.

Skin & hand protection: Protective clothing as necessary to guard against product contact. Butyl rubber gloves.

Respiratory protection: A certified organic respirator is recommended.

Other protective equipment: Eye wash stations and emergency showers should be available. The type and degree of personal protective equipment will depend on the specific work operation.

8.3 Environmental exposure controls: None established.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties.

Appearance	: Thin liquid
Color	: Clear
Type of odor	: Amine-like
Vapor pressure	: < .3 mm Hg @ 20C (68F)
Vapor density	: 3.4 @ 15.5-32C (60-90F) (Air = 1)
Boiling point	: 399°F (204°C)
Autoignition temperature	: 473°F (245°C)
Specific gravity	: 1.03 grams / cc
Water solubility	: Miscible and hygroscopic

10. Stability and Reactivity

10.1 Reactivity: Stable at room temperature.

10.2 Stability: Stable at room temperature.

10.3 Hazardous polymerization: Will not occur by itself.

10.4 Conditions to avoid: Contact with moisture, heat, open flame, sparks and oxidizing agents.

10.5 Incompatible materials: See conditions to avoid.

10.6 Hazardous decomposition products: Carbon monoxide and nitrogen oxide.

11. Toxicological Information

11.1 Acute oral toxicity: LC50 Oral: 4150 mg/kg (rat)

11.2 Acute dermal toxicity: LD50 (rat) >5,000 mg/kg

11.3 Acute inhalation toxicity: LC 50 > 5.1 mg/l aerosol, 4 hours (rat)

11.4 Skin corrosion/irritation: Not classified. May cause mild skin irritation.

11.5 Serious eye damage/eye irritation: Classified. Causes serious eye irritation.

12. Ecological Information

12.1 Acute aquatic toxicity: Not classified. Low toxicity to fish.

12.2 Chronic aquatic toxicity: Not classified. Readily biodegradable.

12.3 Persistence and degradability: This material is considered readily biodegradable.

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13. Disposal Considerations

13.1 Waste treatment methods: Do not dump into any sewers, on the ground, or into any body of water. Significant quantities of waste product residues should be processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local requirements.

Container disposal: Drain container of all material prior to disposal. Do not use cutting torch.

14. Transport Information:

Special Provisions:

Not regulated by USDOT when shipped in packages of 119 gallons or less.

14.1 DOT: Bulk Quantities greater than 119 gallons.

Proper Shipping Name: Combustible liquid, n.o.s. (N-Methyl Pyrrolidone)

UN Number: NA1993

Hazard Class: Combustible Liquid

Packing Group: III

Labels: 3

15. Regulatory Information

15.1 Safety health and environmental regulations/legislation:

SARA Section 302/304, No ingredient listed.

SARA 311/312 Immediate (acute) health. Fire hazard.

SARA 313, contains no known chemicals regulated under SARA 313.

OSHA/NTP/IARC Carcinogen Status: Not listed.

Chemicals known to the state of California to cause Cancer or reproductive toxicity: None known.

Pennsylvania, Massachusetts & New Jersey (Worker and Community Right-to-Know Act): Hazardous Substance List and/or Environmental Hazardous Substance List and/or Special Hazardous Substance List: None.

16. Other Information

HMIS Classification: Health: 2 Chronic Health Hazard* Fire: 2 Physical Haz.: 0

NFPA Classification: Health: 2 Fire Hazard: 2 Instability: 0