

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: 8/14/13

Supersedes: 9/26/12

Reason for revision: New format

1.3 Manufacturer:

Metzger/McGuire Co.
PO BOX 227
CONCORD, NH 03302-2217
PH: (800) 223-6680
FAX: (603) 224-6020
Email: info@metzgermcguire.com

1.4 In Case of Emergency: INFOTRAC: 1-800-535-5053

Outside the US and Canada, call 1-352-323-3500

2. Hazards Identification

2.1 OSHA/HCS status: This material is considered hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification: Combustible. May cause respiratory tract, eye and skin irritation.

Skin contact: Skin absorption hazard. Prolonged or repeated exposure may cause skin irritation; may cause skin sensitization by skin contact.

Eye contact: May cause irritation; permanent corneal injury is unlikely.

Ingestion: May cause discomfort and irritation of the gastrointestinal tract and CNS depression (fatigue, dizziness, collapse, coma and death).

Inhalation: Signs of respiratory tract irritation (such as nasal discharge and difficulty breathing) may occur after exposure to aerosol or high vapor concentrations.

Classification according to EC No. 1272/2008 (CLP/GHS)

Skin Irritation Cat. 2 H315

Skin Sensitization Cat. 1 H317

Eye Irritation Cat. 2 H320

Aquatic Chronic 2 H413

Classification according to Directive 67/548/EEC:

Xi R36/38 R43;

N R52/R53

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2.2 Label Elements (EC 1272/2008):

Hazard pictograms:



Signal word: Warning

Hazard statements:

H301 Toxic if swallowed

H315 Causes skin irritation.

H317 May cause an allergic skin reaction

H320 Causes eye irritation

H332/H335/H336 Harmful if inhaled. May cause respiratory irritation. May cause dizziness

H373 May cause damage to organs (bone marrow, liver, kidney and testicular).

H413 May cause long lasting harmful effects to aquatic life

2.3 Precautionary statements:

P264 Wash thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves / protective clothing / eye protection / face protection, certified organic respirator.

P302 + P352 **IF ON SKIN:** Wash with plenty of soap and water.

P333 + P313 If skin irritation or rash occurs: Get medical advice / attention.

Contains: N-Methyl-2-pyrrolidinone

See toxicological information (Section 11)

GENERAL INFORMATION: Read the entire SDS for a more thorough evaluation of the hazards.

3. Composition/Information on Ingredients

	<u>Name</u>	<u>CAS number</u>	<u>EC-No.</u>
3.1 Substances	N-Methyl-2-pyrrolidinone	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: 195.8F (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.

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: 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: Keep containers tightly closed and store 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	: 204C (399°F)
Specific gravity	: 1.03 grams / cc
Water solubility	: Soluble
pH	: 7-8

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 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: No data

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

Acute inhalation toxicity: LC 50 > 5.1 MG/L aerosol 4 hours (rat)

12. Ecological Information

12.1 Toxicity (ecotoxicity effects) moderately toxic to aquatic organisms on an acute basis
Acute EC50 >100 mg/L 48 hours (Daphnia).

12.2 Persistence and degradability: This material is considered as 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 residual material prior to disposal.

14. Transport Information:

14.1 DOT Bulk and Non-Bulk:

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

ID No. NA1993

Hazard Class: Combustible Liquid

Packing Group: III

15. Regulatory Information

15.1 Safety health and environmental regulations/legislation:

OSHA Hazard Communication Standard, 29 CFR 1910.1200. Not hazardous

SARA Title III Section 302/304/311/312 (40CFR370): No ingredient listed.

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

SARA Title III Section 313 (40CFR372): N-Methyl Pyrrolidone. Reporting threshold 1%.

OSHA/NTP/IARC Carcinogen Status: Not listed.

Chemicals known to the state of California to cause Cancer or reproductive toxicity: Listed

Pennsylvania, Massachusetts & New Jersey (Worker and Community Right-to-Know Act): Hazardous

Substances List and/or Environmental Hazardous Substance List and/or Special Hazardous Substance List:

N-Methyl Pyrrolidone- Listed

16. Other Information

HMIS/NFPA rating: Health: 2 Fire: 2 Reactivity: 0

Label requirements: May cause respiratory tract, eye and skin irritation. Combustible Liquid. (Personal protective equipment selection is best assigned by the user after performing a hazard assessment on the product as it is to be used in the specific work process).

Recommended uses and Restrictions: Identified uses: Solvent cleaning.