Section 1 - Identification

Product Name: LMF-77 A liquid alkaline detergent.

Damon Industries, Inc. 12435 Rockhill Ave NE Alliance, Ohio 44601 U.S.A. 1-800-362-9850 1-330-821-5310 1-330-821-6355 Fax info@DamonQ.com

24 HOUR EMERGENCY RESPONSE

1-800-535-5053 (U.S. & Canada) 001-352-323-3500 (International)

Number: DMN0412

Revised: 2/23/16

Section 2 - Hazards Identification

Hazard categories: Skin Corrosion/Irritation 2; Eye Corrosion/Irritation 2A Hazard statements: Causes skin irritation and serious eye irritation.

Signal word: Warning

Pictogram: Exclamation point Precautionary statements

Prevention

Wash hands thoroughly after handling. Wear protective gloves such as latex.

Wear eye protection such as safety glasses with side shields.

Response

IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. continue rinsing. If eye irritation persists: Get medical attention.

Storage - None. <u>Disposal</u> - None.

Section 3 - Composition / Information on Ingredients

Ingredient	C.A.S. No.	Concentration
Water	7732-18-5	89%
Alcohols, C9-11, ethoxylated	68439-46-3	4%
Potassium hydroxide	1310-58-3	2%

The remaining ingredients are not reportable as described in Appendix D to Sec. 1910.1200 Table D.1.

Section 4 - First Aid Measures

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing, lifting upper and lower eyelids occasionally. If eye irritation persists: Get medical attention.

Skin Contact: With concentrate and strong (1:10) solutions immediately flush exposed skin with running water for 15 minutes. Remove contaminated clothing and shoes immediately. With milder solutions remove contaminated clothing and wash exposed skin with soap and water. If irritation persists, get medical attention. Wash contaminated clothing before wearing again.

Inhalation: Move the affected person to fresh air. If irritation persists get medical attention.

Ingestion: If the product is swallowed, do NOT induce vomiting. If the affected person is conscious, give a glass of water or milk to drink. Get medical attention immediately.

Section 5 - Fire-Fighting Measures

Extinguishing Media: Any

Special Fire Fighting Procedures: None.

Unusual Fire And Explosion Hazards: None.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Small spills of a few gallons may be cleaned up with a rag or mop. Larger spills should diked to prevent spreading and then collected into clean pails or drums.

Section 7 - Handling and Storage

Empty containers retain product residue and may be hazardous. Observe all precautions given in this data sheet. Keep from freezing.

Section 8 - Exposure Controls / Personal Protection					
Ingredient C.A.S. No. Concentration TWA(source) STEL Ceiling					
Potassium hydroxide	1310-58-3	2%	2 mg/m ³ (2)	-	2 mg/m ³ (3,4)
(1)=OSHA (2)=NIOSH (3)=ACGIH	(4)=CANADA	ΓWA=8 hour Time	e Weighted Average	STEL=15 minute TV	WA Ceiling=Instantaneous

Evaluate the need for particular personal protective equipment in each job situation.

Ventilation: Good room ventilation. Mechanical ventilation is normally not required.

Respiratory Protection: None except when spraying overhead or using in enclosed spaces. Overhead spraying requires the use a NIOSH approved respirator with an organic vapor cartridge to avoid inhaling mist. Use in enclosed,

poorly ventilated spaces requires a respirator and may require self-contained breathing apparatus. If trigger sprayer mist is a problem use a nuisance-dust mask to stop airborne droplets from being inhaled.

<u>Gloves:</u> Use rubber or latex gloves when handling concentrate or strong dilutions. Persons with sensitive skin or who use the product for prolonged periods may wish to use rubber or latex gloves when using any dilution.

Eye Protection: Some uses of diluted product do not require eye protection although the use of safety glasses, especially for contact lens wearers, is always suggested. Concentrate or strong (1:10) solutions require safety glasses with side shields. Overhead spraying requires at minimum goggles or a face shield, or if considerable spray will fall on the user, full head and body protection. Each job should be evaluated before use.

<u>Other Protective Equipment</u>: An eyewash station should be located within 10 seconds travel time of concentrate use/mixing area and where solutions of 1:10 or stronger are used. The use of aprons, boots and impervious clothing should be evaluated if there is a likelihood of splashing or contact with sprayer mist.

Section 9 - Physical and Chemical Properties

Appearance and Odor: A pinkish-orange liquid with a pleasant odor.		
Odor Threshold: Not Available	Vapor Pressure: Not Available	
pH: concentrate 12.0 ± 0.5	Vapor Density: Not Available	
Melting Point: Not Available	Relative Density (Specific Gravity): 1.05	
Freezing Point: Not Available	Solubility(ies): Water: 100%	
Boiling Point, Initial: 215° F.	Partition coefficient: Not Available	
Boiling Range: Not Available	Auto-ignition Temperature: Not Available	
Flash Point: None (ASTM D-56 closed cup)	Decomposition Temperature: Not Available	
Evaporation Rate: ~1 (Water = 1)	Viscosity: Same as water	
Flammability: (solid, gas): Not Applicable	Volatiles Percent: 90%	
Upper Explosive Limit: None	V.O.C.: 0.9% - 8.9 grams/liter	
Lower Explosive Limit: None		

Section 10 - Stability and Reactivity

Incompatibility: None Hazardous Decomposition Products: None

Section 11 - Toxicological Information

Primary Routes of Entry: X Skin contact; Skin absorption; X Inhalation; X Ingestion

Potential Health Effects:

Eyes - concentrate and strong solutions may cause eye damage. Milder solutions cause irritation and redness.

Skin - prolonged contact with concentrate and strong solutions may cause skin damage. There is little or no effect if rinsed off thoroughly right away. Milder solutions cause irritation only.

Swallowing - may result in damage to mucous membranes and gastrointestinal irritation.

Breathing - excessive inhalation of mist or spray can cause coughing and irritation of the nose and throat.

Section 12 - Ecological Information

When scrubbing outdoors or where run-off will enter a storm sewer, flood the cleaned area with plenty of water to dilute and reduce the pH of the run-off. Do not use more product than necessary. Do not dispose of unusable product in the environment. Be sure to comply with any applicable regulations.

Section 13 - Disposal Considerations

<u>Waste Disposal Method</u>: Dispose of up to 2 gallons of concentrate in the sanitary sewer with a large amount of water. Larger amounts must be neutralized to within the pH limits of your waste water treatment system.

Section 14 - Transport Information

D.O.T. Hazard Class: Not considered hazardous by D.O.T., I.M.C.O., I.A.T.A. or U.N.

Section 15 - Regulatory Information

The components of this product are on the TSCA inventory of chemical substances.

Section 16 - Other Information

NFPA: H:1 F:0 I:0 **HMIS**[®] **III:** H:2 F:0 P:0 These ratings estimates are to be used only with a fully implemented training program in the workplace. NFPA[®] is a mark registered by the NFPA. HMIS[®] is a mark registered by the NPCA.

Replaces sheet date 4/28/15. Changes to Section 8.

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Extinguishing Media: Any

Special Fire Fighting Procedures: None.

Unusual Fire And Explosion Hazards: None.

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Melting Point: Not Available	Relative Density (Specific Gravity): 1.05	
Freezing Point: Not Available	Solubility(ies): Water: 100%	
Boiling Point, Initial: 215° F.	Partition coefficient: Not Available	
Boiling Range: Not Available	Auto-ignition Temperature: Not Available	
Flash Point: None (ASTM D-56 closed cup)	Decomposition Temperature: Not Available	
Evaporation Rate: ~1 (Water = 1)	Viscosity: Same as water	
Flammability: (solid, gas): Not Applicable	Volatiles Percent: 90%	
Upper Explosive Limit: None	V.O.C.: 0.9% - 8.9 grams/liter	
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