MATERIAL SAFETY DATA SHEET

| 1. | Product and Company Identification | |
|------------------------------|---|--|
| Product Name | MARKSMEN | |
| CAS# | Mixture | |
| Product Use | Acidic rinse for carpet and fabrics | |
| Manufacturer | Powr-Flite, A Division of Tacony Corporation | |
| | 3101 Wichita Court | |
| | Fort Worth, TX 76140-1710 | |
| Emergency Telephone Number | 1-800-424-9300 | |
| Telephone Information | 1-800-880-2913 or website <u>www.powrflite.com</u> | |
| | | |
| HMIS LEGEND | | |
| Severe 4 | Health 2 Diamachility 0 | |
| Serious 3 Moderate 2 | Flammability 0 | |
| 1110 401 400 - | Reactivity 0 | |
| Slight 1 | Personal Protection B | |
| Minimal 0 | | |
| | | |
| | 2. Hazards Identification | |
| Emergency Overview | Warning: Eye and skin irritant | |
| Potential short term effects | | |
| Routes of exposure | Eye, Skin contact, Inhalation, Ingestion. | |
| Eyes | Causes irritation. | |
| Skin | Contact with skin may cause severe irritation. | |
| Inhalation | May cause respiratory tract irritation, and headache/dizziness. | |
| Ingestion | May cause stomach distress, nausea or vomiting. | |
| Target organs | Eyes, Skin, Mucous membrane | |
| Chronic effects | Prolonged exposure can cause drying, defatting, or dermatitis. | |
| Signs and symptoms | Symptoms may include irritation, redness, scratching of the cornea and tearing. | |

3. Hazardous Ingredients

Symptoms of over exposure may be headache, dizziness, tiredness, nausea and

The criteria for listing components in this section are: Carcinogens are listed when present at 0.1% or greater; components which are otherwise hazardous according to OSHA are listed when present at 1.0% or greater. Non hazardous components are not listed. This is not a composition disclosure.

Hazardous Components

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CAS#

vomiting

%(optional)

Ingredients are not considered hazardous per 29 CFR 1910.1200

4. First Aid Measures

| First Aid Procedures | |
|----------------------|--|
| Eye Contact | Flush with cool running water for 15 minutes. Get medical attention immediately. |
| Skin Contact | Flush with cool water, Wash with soap and water, If irritation persists, get medical Attention. |
| Inhalation | If symptoms develop, move to fresh air. If symptoms persist, get medical attention |
| Ingestion | Rinse mouth with water. Drink one or two glasses of water. Do not induce vomiting. Obtain medical attention. Never give anything by mouth to an unconscious person. |
| Notes to Physician | Symptoms may be delayed. |
| General advice | Seek medical attention if feeling unwell. Show the MSDS to the physician in attendance. |

5. Fire-fighting Measures

| Flammable properties | Not flammable |
|---------------------------------|---|
| Extinguishing media | Treat for surrounding material. |
| Protection of firefighters | Firefighters should wear protective clothing including self contained breathing |
| | apparatus . |
| Hazardous combustion products | May include and not limited to oxides of carbon. |
| Unusual Fire, Explosion hazards | None known. |
| | |

6. Accidental Release Measures

| Personal precautions | Keep unnecessary personal away. Do not touch or walk through spilled material. |
|-------------------------|--|
| | Do not touch damaged containers or spilled containers unless wearing protective |
| | Clothing. Stay upwind of spills or leaks. |
| Methods for containment | Stop leak if you can do so without risk. Prevent entry into waterways, sewers. |
| Methods for cleaning up | Before attempting clean up refer to hazard data given above. Small spills may be absorbed with non reactive absorbent and placed in suitable, covered, labeled containers. Prevent large spills from entering sewers or water ways. Contact emergency personnel or supplier for advice. Never return spill to original container for reuse |
| | 7. Handling and Storage |

Handling Storage

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Use good industrial hygiene practices when handling this material Keep out of reach of children. Keep from freezing, store in a cool dry place away from incompatible materials.

8. Exposure Controls and Personal Protection

| Exposure limits | | |
|--------------------------------|--|---|
| Ingredients | OSHA PEL | ACGIH TLV |
| Citric acid | not established | TWA: 10mg/m ³ |
| Engineering controls | Use only under good ventilation co | onditions or with respiratory protection. |
| Personal protective equipment | | |
| Eye/Face protection | Wear chemical goggles, safety glasses with side shields. | |
| Hand protection | Rubber or nitrile gloves. | |
| Skin and body | As required by employer code. | |
| Respiratory protection | Use a NIOSH approved respirator when exposure guidelines are exceeded. | |
| General hygiene considerations | Handle in accordance with good industrial hygiene practices. Do not eat or drink when using product. Wash hands well before breaks and immediately after handling the product. | |

9. Physical and Chemical Properties

| | v 1 | |
|---------------------|--------------------------|--|
| Appearance/form | Clear liquid | |
| Color | Light straw to colorless | |
| Odor | Slight organic | |
| рН | 1.95-2.05 (100%) | |
| Boiling point | > 212° F. | |
| Specific gravity | 1.01-1.05 | |
| Evaporation rate | Not available | |
| Vapor pressure | Not available | |
| Vapor density | Not available | |
| Solubility in water | Complete | |
| Flash point | None | |
| VOC | < 1% | |
| % Volatile | Approx. 90% | |
| | Page 2 of 4 | |
| | | |

10. Stability and Reactivity

| Chemical Stability | Stable under normal storage conditions. |
|----------------------------------|--|
| Conditions to avoid | Reacts violently with alkaline materials. Do not mix with other chemicals. |
| Incompatible materials | Bases, reducing agents, oxidizers and metals. |
| Hazardous decomposition products | May include but not limited to oxides of carbon. |
| Hazardous polymerization | Will not occur |
| | |

11. Toxicological Information

| Ingredients | LC50 |
|-----------------------------|---|
| Citric acid | not available |
| Ingredients | LD50 |
| Citric acid | 5040 mg/kg mouse, 3000 mg/kg rat |
| Effects of acute exposure | |
| Eye | Causes irritation |
| Skin | May cause severe irritation. |
| Inhalation | May cause respiratory tract irritation, and central nervous system effects (headaches, dizziness) |
| Ingestion | May cause stomach distress, nausea, or vomiting. |
| Sensitization | Non hazardous. |
| Chronic effects | Non hazardous. |
| Carcinogenicity | Does not contain ingredients considered carcinogenic by NTP, IARC, or OSHA. |
| Mutagenicity | Non hazardous. |
| Reproductive effects | Non hazardous. |
| Teratogenicity | Non hazardous. |
| | |

12. Ecological Information

| | 12. Ecological Information | |
|---------------------------------|--|--|
| Eco-toxicity | Components of this product have been identified as having potential | |
| | environmental concerns. The low pH of the product would be expected to produce | |
| | significant eco-toxicity upon exposure to aquatic organisms. | |
| Eco-toxicity-Freshwater Fish S | pecies data: | |
| Citric acid | 96 Hr LC 50 Lepomis macrochinus: 1516 mg/l | |
| | 96 Hr LC 50 Leuciscus idus: 440 mg/L | |
| Eco-toxicity-Microtox data: | | |
| Citric acid | 15 min EC50 Photobacterium phosphoreum: 14 mg/L | |
| Eco-toxicity-Water flea data: | | |
| Citric acid | 72 Hr EC50 Daphnia magna: 120 mg/L | |
| Environmental effects | Not Available | |
| Aquatic toxicity | Not Available | |
| Persistence and Degradability | Not Available | |
| Bioaccumulation/accumulation | Not Available | |
| Partition coefficient | Not Available | |
| Mobility in environmental media | Not Available | |
| Chemical fate information | Not Available | |
| Other adverse effects | Not Available | |

13. Disposal Considerations

| Waste codes | Not Available |
|-----------------------------|---|
| Disposal instructions | Dispose in accordance with local, state, and federal regulations |
| Wastes from residues/unused | Containerize. Rinse area with water. Keep out of storm sewer/waterways. |
| Product | |
| Contaminated packaging | Dispose in accordance with all applicable regulations. |
| | |

| | 14. ITansport intormatio | 11 |
|---|--|---|
| Basic shipping requirements: | Not DOT regulated | |
| Proper shipping name | | |
| Hazard class | | |
| UN number | | |
| Packing group | | |
| Special provisions | | |
| Packaging exceptions | | |
| | | |
| | | |
| | 15. Regulatory Information | n |
| U.S federal regulations | This product has been classified in account | ordance with the Occupational Safety and |
| 5 | Health Administration hazard criteria a | nd the MSDS contains all of the |
| | information required by OSHA. | |
| HMIS classification | Irritant | |
| Inventory Status | | |
| Countries | Inventory Name | On Inventory (Yes/No)* |
| U.S. | Chemical Inventory List | Yes |
| Canada | Domestic substances list | Yes |
| • A "Yes" indicates that all of the governing country(s) listed | e components of this product comply with the | ne inventory requirements administered by |

14. Transport Information

16. Other Information

| Disclaimer | To the best of our knowledge, the information included herein is accurate. However, neither the above named supplier nor any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any material is the responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. |
|-------------------|--|
| Issue date | April 4, 2014 |
| Supersedes date | November 15, 2010 |
| Reason for update | Conform to OSHA update requirements |
| Expiration date | April 4, 2017 |