



Safety Data Sheet

Flamecheck M-111 Fire Retardant

1. Chemical Product and Company Identification

Product name:	Flamecheck M-111
CAS No:	Not applicable to the mixture
Intended use:	Fire Retardant Spray for natural and synthetic absorbent materials
Manufacturer:	Flamecheck International LLC
Address:	4353 S Santa Rita Ave, Tucson AZ 85714
Phone:	520-528-1527

2. **Hazards Identification:** General: In all cases of doubt or when symptoms persist seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in the recovery position and seek medical attention

3. Composition / Information on Ingredients Chemical Description

None	PEL	TLV
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No toxic chemical(s) are subject to the reporting requirements of section 313 of SARA Title III and the 40 CFR 372 are present. Product not classified as hazardous according to EEC Regulations. pH is between 5.9-6.8 when liquid, avoid skin & eye contact. When dry, product does not constitute any risk or hazard. The precise composition of this mixture is proprietary information. A more complete disclosure will be provided to a Physician or Nurse as needed, in the event of a medical emergency. No constituents of this mixture have OSHA established permissible exposure limits (PEL) or ACGIH established threshold limit values (TLV).

4. First Aid Measures:

Eyes: Contact lenses should be removed. Flush with a copious volume of water for 15 minutes, holding eyelids apart.
Skin: Wash off with plenty of water. Seek medical attention if any symptoms persist.
Inhalation: Remove to fresh air. Keep calm and warm. If breathing has stopped give artificial respiration and seek medical attention.
Ingestion: Wash mouth out with water and give milk or water to drink (unless unconscious). Seek immediate medical attention.

5. **Fire Fighting Measures:** Extinguishing Media: Product is not combustible. Use media appropriate to material on fire. Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing. In a large fire, water may boil off leaving a residue, which, if exposed to high temperatures, may decompose with possible resultant production of Ammonia, Oxides of Nitrogen, Oxides of Phosphorous, Carbon Dioxide, and possibly Carbon Monoxide. Fumes of Sulfuric Acid may be evaporated off from the product. Keep containers cool by water spray.

6. **Accidental release measures (spillage):** Spill Cleanup Procedures: Always wear personal protective equipment (see Section 8). For small spills either absorb with absorbent material and transfer to a sealed container for approved disposal or flush away using large volumes of water. For large spills dam off spillage and pump/transfer to containers. Any residue should be treated as per small spillage. Observe all national/local regulations when disposing of any chemical product.

7. **Storage and Handling (normal use):** Store in sealed containers in a cool dry place. Apply adequate factory hygiene principles when using this product. Wear appropriate personal protective equipment. Avoid eye and skin contact.
Storage Precautions: Store in original sealed containers in a cool dry area.
Storage Temperature: -5°C to +30°C
Shelf Life: Indefinite

8. **Exposure Controls / Personal Protection:** Comments: Working procedures should be designed to minimize worker exposure to the product. Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Take measures to minimize inhalation when spraying.
Protective Gloves: Wear impervious gloves.
Eye protection: Wear Safety goggles/face visor



Other Protection: If splashes are likely, wear protective boots and clothing. If to be sprayed, recommend the use of adequate face mask with respiratory protection.

9. **Physical and Chemical Properties:**

Appearance	Straw Colored Liquid	Specific Gravity (water=1)	1.10
Odor	Lemon	Boiling Point	110°C
Solubility in water	Miscible	Vapor Density (Air=1)	>1
Physical State	Liquid	VOC	0lb/G1
pH	5.4-6.6	Freezing Point	-15°C

10. **Stability and Reactivity:** Stability: Stable under normal conditions may become cloudy at low temperatures. If product freezes thaw and then stir or mix liquid once the product has reached room temperature. Materials to avoid: Strong acids and bases and oxidizing agents as the product is mildly acidic will corrode some metals on prolonged contact.

11. **Toxicology Information:** Medical Symptoms: Contact with skin unlikely to have any effects. Washing off with water should suffice. Prolonged or repeated contact may produce some irritation and dermatitis. Eye contact may produce some minor irritation but damage unlikely if washed out immediately. If allowed to remain in eye however some irritation and/or burns may occur. Inhalation of small amounts is unlikely to have any effects bar mild irritation of the respiratory tract. However, if large quantities are inhaled the product may cause respiratory irritation and act as a sedative. It may affect the central nervous system. Symptoms of acute poisoning include decreased motor activity, breathing difficulties, loss of muscular coordination, drowsiness, irritability, vertigo, confusion, hallucination, and coma. Ingestion of very large quantities may result in internal irritation, vomiting and abdominal cramps in addition to effects similar to those which are caused by inhalation of large doses.

12. **Ecological Information:** Mobility: Product totally miscible with water.
 Tests on the effect of the product on sewage bacteria:
 Test Ree: 30:4/CJR/MD Dr. R. H. Reed Newcastle Polytechnic
 Extremely low COD mg/ml of 45 = Non-Toxic
 Extremely low BOD mg/ml <10 = Non-Toxic
 The results show that M-111 is unlikely to represent any danger should this product enter a body of water in concentrations of 5ppm and 10ppm as tested. The full report is available upon demand. The product is biodegradable.

13. **Disposal Considerations:** Disposal Methods: Via an approved Waste Disposal Contractor to an approved Waste Disposal Site. Observe all national/local regulations.

14. **Transport Information (Regulations)**

Road, Air or Sea: Product is not classified as hazardous for transportation purposes according to EEC Regulations. Packaging 5 and 55-gallon poly containers.

15. **Regulatory Information (Supply and Labeling):**

Supply Class	None
Hazard Pictogram	None
Risk Phases	None
Safety Phases	S2 – Keep out of the reach of children S24-25 – Avoid contact with eyes and skin S26 – In case of eye contact, flush with water seek medical attention. S37 – Use suitable gloves and protective clothing

16. **Other Information:** Disclaimer: Flamecheck makes no guarantee, nor any express or implied warranty of merchantability or fitness for a particular use regarding the suitability of this product for any particular purpose or use, nor does it assume any liability arising out of the application or mis-use of this product. Application techniques vary; therefore, it is the end user's responsibility to test and verify the application techniques and suitability of this product for the intended use. Always test after application. Flamecheck International LLC only warrants the quality control of this product. For the complete disclaimer regarding this product, visit the www.flamecheck.com.