

Waysmos USA Inc
9111 Jollyville Rd Suite 100
Austin, Texas 78759
646-593-8882

MATERIAL SAFETY DATA SHEET

HEXAFLUOROPROPANE

SECTION I PRODUCT AND DISTRIBUTOR INFORMATION

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|---------------------------------|--|
| TRADE NAME / LABEL NAME | MH236, HFC-236fa |
| CAS NUMBER | 690391 |
| CHEMICAL FAMILY | Halogenated alkane; Hydrofluorocarbon |
| CHEMICAL NAME | 1,1,1,3,3,3-Hexafluoropropane |
| SYNONYMS | 2H-Hexafluoropropane; HFC-236fa; R-236fa; FE36 |
| DISTRIBUTOR'S NAME | WAYS MOS USA INC . |
| DISTRIBUTOR'S ADDRESS | 9111 Jollyville Rd Suite 100, Austin, Texas 78759 |
| PHONE | 800-633-8253, If outside USA call +1 -801-629-0667 |
| FACSIMILE | |
| DATE OF PREPARATION PRODUCT USE | June 27, 2010 Fire/explosion extinguishing, suppression and prevention (inerting) agent for use in portable extinguisher or total flooding systems. THIS PRODUCT IS NOT SUITABLE FOR USE AS AN ACTIVE PHARMACEUTICAL INGREDIENT, PHARMACEUTICAL EXCIPIENT OR DOSAGE AGENT. |

SECTION II " COMPOSITION AND INGREDIENT INFORMATION

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| CHEMICAL NAME | 1,1,1,3,3,3-Hexafluoropropane |
| CAS Number | 690391 |
| % w/w | > 99.5 |
| OSHA PEL TWA mg/m ³ | Not established |
| OSHA PEL STEL mg/m ³ | Not established |
| OSHA PEL CEIL mg/m ³ | Not established |
| ACGIH TLV TWA mg/m ³ | Not established |
| ACGIH TLV STEL mg/m ³ | Not established |
| ACGIH TLV CEIL mg/m ³ | Not established |
| TOXICITY DATA | N/A |

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SECTION III " PHYSICAL AND CHEMICAL CHARACTERISTICS

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| GENERAL | Colorless, liquefied gas |
| BOILING POINT | -1.4C |
| VAPOR PRESSURE (@ 25iC / 77iF) | 272KPa |
| VAPOR DENSITY (AIR =1) | 6.481 |
| WATER REACTIVE | NO |
| SPECIFIC GRAVITY (H ₂ O =1) | 1.370 |
| PERCENT VOLATILE (by volume) | N/A |
| EVAPORATION RATE (Butyl acetate = 1) | N/A |
| VISCOSITY (@ 20iC / 68iF) | N/A |
| MELTING POINT | -98C / -144 F |

SECTION IV " FIRE AND EXPLOSION HAZARDS

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| FLASH POINT | N/A |
| FLAMMABLE LIMIT (in air; % by volume) | N/A |
| AUTO-IGNITION TEMPERATURE | N/A |
| EXTINGUISHING MEDIA | All are suitable. While product is non-flammable and extinguishes fires at sufficient concentration, can undergo thermal decomposition if involved in fires where quantity of product is insufficient to extinguish. Thermal decomposition products may be toxic or corrosive. |
| UNUSUAL FIRE AND EXPLOSION HAZARDS | Container rupture possible if pressure and temperature relief valves should fail. |
| SPECIAL FIRE FIGHTING PROCEDURES | Employ water spray from a safe distance to prevent container rupture. If containers should rupture, use self contained breathing apparatus. Product is non-flammable, but denser than air, posing asphyxiation risk. Thoroughly ventilate affected area to remove product and any decomposition products before allowing re-entry. |

SECTION V " REACTIVITY DATA

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| STABILITY | Stable |
| CONDITIONS TO AVOID | N/A |
| HAZARDOUS POLYMERIZATION | N/A |
| INCOMPATIBLE MATERIALS | Powdered metals such as aluminum, magnesium or zinc; strong alkaline agents; oxidizing agents; reducing agents. |
| HAZARDOUS DECOMPOSITION PRODUCTS | Thermal decomposition products may include hydrogen fluoride, carbon monoxide and carbon dioxide. |

SECTION VI " HEALTH HAZARD DATA

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| THRESHOLD LIMIT VALUE | N/A |
| POTENTIAL EXPOSURE ROUTES | Inhalation " Yes Eye contact " Yes Skin contact - Yes Ingestion " No |
| SIGNS AND SYMPTOMS OF OVEREXPOSURE | Inhalation of excessive concentrations in air may induce symptoms of hypoxia (headache, nausea, dizziness, loss of consciousness) or cardiac sensitization (irregular pulse or arrhythmia). Product is a cryogenic gas. Direct skin contact at point of release may cause symptoms of frostbite due to evaporative cooling (cold, white, discolored skin that, in severe cases, may exhibit blistering). |
| MEDICAL CONDITIONS POTENTIALLY AGGRAVATED BY EXPOSURE | Pre-existing cardiac, respiratory or CNS disorders may be exacerbated by overexposure. Epinephrine or sympathomemetic drugs may increase susceptibility to cardiac irregularities upon overexposure. |

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| CARCINOGENICITY | NTP Program " No IARC Monographs " No OSHA " No ACGIH " No Other " No |
| MUTAGENICITY | S. typhimurium assay " No Mouse lymphoma assay " No Mouse micronuclei assay " No |
| LC ₅₀ | > c. 457,000 ppm |
| EMERGENCY AND FIRST AID PROCEDURES | Inhalation " Move to fresh air. Artificial respiration if not breathing. Administer oxygen if breathing is labored. Seek medical attention. Eye contact " Flush/irrigate with fresh water. Seek medical attention. Skin contact " Flush/irrigate (spray) with water. Apply sterile dressing as necessary.. Seek medical treatment for symptoms of frostbite. Ingestion " N/A NOTE TO PHYSICIANS: In treating cases of overexposure through inhalation, use of epinephrine, sympathomimetics or other stimulants is contraindicated as such compounds increase susceptibility to cardiac sensitization (irregular pulse or arrhythmia). |

SECTION VII " SPILL/LEAK PROCEDURES AND SPECIAL PRECAUTIONS

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| HANDLING AND STORAGE PRECAUTIONS | Store in a cool, dry, well-ventilated area separate from incompatible materials. Protect containers from mechanical damage. Follow fire equipment manufacturer instructions for operation, inspection, maintenance and repair of portable extinguishers and fixed extinguishing systems. |
| OTHER PRECAUTIONS | Prohibit back feed into containers. |
| RELEASE OR SPILL PROCEDURES | Evacuate and ventilate the affected area. Prohibit general entry into areas where high concentrations may exist, particularly confined or poorly ventilated areas. Keep in mind that this product is denser than air and that concentrations will be higher at lower levels (sewers, basements or pits). Trained personnel should use self-contained breathing apparatus when entering areas where high concentrations may exist. |
| WASTE DISPOSAL | Product can be reclaimed unless contaminated. Contact distributor to arrange reclamation. Otherwise, disposal should be in accordance with applicable law, generally by incineration at a qualified facility with an appropriate scrubber and other emission control technology. |

SECTION VIII " SPECIAL PROTECTION INFORMATION

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| RESPIRATORY PROTECTION | NIOSH/MSHA approved self-contained breathing apparatus for entry into areas where high concentrations may exist. |
| VENTILATION | Passive ventilation (windows, doors, etc.) generally adequate for small areas. Mechanical ventilation for control of large areas and storage or filling facilities. |
| DERMAL PROTECTION | Lined, neoprene gloves for handling liquid product. |
| EYE PROTECTION | Shatterproof chemical splash goggles when handling liquid or working on pressurized containers. |
| OTHER PROTECTIVE EQUIPMENT | Clothing to minimize contact with liquid product or at potential points of release. |
| OTHER PROTECTIVE PRACTICES | Employ prudent confined space entry and related procedures (confirm equipment is free of product and has been ventilated, etc.). As with all chemical products, wash thoroughly after handling and wash contaminated clothing before re-use. |

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATINGS

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|------------|------------------|----------------|
| HEALTH = 1 | FLAMMABILITY = 0 | REACTIVITY = 1 |
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HAZARD INDEX:

0 = MINIMAL HAZARD, 1 = SLIGHT HAZARD, 2 = MODERATE HAZARD,
 3 = SERIOUS HAZARD AND 4 = SEVERE HAZARD

SHIPPING INFORMATION " U.S. DOT GENERAL

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|--------------------------|-----------------------------------|
| DOT SHIPPING NAME | HEXAFLUOROPROPANE |
| DOT ID NUMBER | UN3163 |
| DOT HAZARD CLASS | 2.2 NON-FLAMMABLE, COMPRESSED GAS |
| PACKING GROUP | N/A |
| PACKAGING INSTRUCTIONS | 200 |
| SPECIAL PROVISIONS | T50 |
| NON-BULK PACKAGING | 304 |
| PASSENGER AIR/RAIL LIMIT | 75 kg/package |
| AIR CARGO LIMIT | 150 kg/package |
| VESSEL STOWAGE | A |
| REPORTABLE QUANTITY | None specified |
| LABEL | NON-FLAMMABLE GAS |
| PACKAGING EXCEPTIONS | 306 |
| BULK PACKAGING | 314/315 |
| OTHER STOWAGE | N/A |

AIR TRANSPORT " ICAO OR IATA

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|--------------------------------|-----------------------------------|
| PROPER SHIPPING NAME | HEXAFLUOROPROPANE |
| ID NUMBER | UN3163 |
| HAZARD CLASS | 2.2 NON-FLAMMABLE, COMPRESSED GAS |
| SUBSIDIARY RISK | N/A |
| PACKING GROUP | N/A |
| PACKAGING INSTRUCTIONS | 200 |
| PACKAGING INSTRUCTIONS " CARGO | 200 |
| SPECIAL PROVISIONS | N/A |
| AIR PASSENGER LIMIT | 75 kg/package |
| AIR CARGO LIMIT | 150 kg/package |
| LABEL | NON-FLAMMABLE GAS |

WATER - IMDG

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|-------------------------|-----------------------------------|
| PROPER SHIPPING NAME | HEXAFLUOROPROPANE |
| ID NUMBER | UN3163 |
| HAZARD CLASS | 2.2 NON-FLAMMABLE, COMPRESSED GAS |
| SUBSIDIARY RISK | N/A |
| PACKING GROUP | N/A |
| MEDICAL/FIRST AID GUIDE | N/A |