

FLUPRO[®]-EC



MATERIAL SAFETY DATA SHEET

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SECTION 1: CHEMICAL IDENTIFICATION

ACTIVE INGREDIENT: (% by weight)

FLUMETRALIN:

2-chloro-N-[2,6-dinitro-4-(trifluoromethyl)phenyl]-N-ethyl-6-fluorobenzenemethanamine)..... 13.7%

PETROLEUM SOLVENT: (% by weight)..... 75.8%

SURFACTANT AND OTHER INERTS: (% by weight)..... 10.5%

TOTAL 100.0%

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

ACTIVE INGREDIENT:

Flumetralin

CAS #: 62924-70-3

MF: C₁₆H₁₂ClF₄N₃O₄

MW: 421.74

PETROLEUM SOLVENT:

Naphtha, heavy aromatic

CAS #: 64742-94-5

SURFACTANT:

Glycol Ethers

SECTION 3: HAZARDS IDENTIFICATION

IRRITANT TO EYES. MAY CAUSE IRRITATION TO SKIN.

CAUTION: AVOID CONTACT AND INHALATION.

EXPOSURE TO HIGH VAPOR CONCENTRATION MAY BE IRRITATING TO EYES AND RESPIRATORY TRACT.

MAY ALSO CAUSE HEADACHES, DIZZINESS, DROWSINESS LEADING TO UNCONSCIOUSNESS.

WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION.

SECTION 4: FIRST-AID MEASURES

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE

ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF SWALLOWED, DO NOT INDUCE VOMITING, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS AND GIVE A LARGE QUANTITY OF WATER TO DRINK. WASH CONTAMINATED CLOTHING BEFORE REUSE. CALL A PHYSICIAN.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT (SETAFLASH): 99°C (210°F)
AUTOIGNITION TEMPERATURE: NOT DETERMINED
FLAMMABLE LIMITS IN AIR: NOT DETERMINED
EXTINGUISHING MEDIA:
CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.
SPECIAL FIREFIGHTING PROCEDURES:
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.
AVOID BREATHING FUMES.
PREVENT RUN-OFF.
UNUSUAL FIRE AND EXPLOSIONS HAZARDS:
COMBUSTIBLE LIQUID. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS ONLY.
LIQUID MAY CREATE A FLOATING FIRE HAZARD.

SECTION 6: ACCIDENTAL RELEASE MEASURES

WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES, FULL-FACE SHIELD, LONG-SLEEVED SHIRT, LONG PANTS AND HEAD COVERING.
FOR SMALL SPILLS, REMOVE POSSIBLE IGNITION SOURCES, COVER WITH AN ABSORBENT MATERIAL, SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL. AVOID RAISING DUST.
WASH THE SPILL AREA WITH WATER CONTAINING A STRONG DETERGENT, ABSORB WITH AN ABSORBENT MATERIAL, SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7: HANDLING AND STORAGE

DO NOT USE OR STORE NEAR HEAT OR OPEN FLAME. KEEP CONTAINERS CLOSED WHEN NOT IN USE.
STORE THE MATERIAL IN A WELL-VENTILATED, SECURE AREA OUT OF THE REACH OF CHILDREN AND DOMESTIC ANIMALS. DO NOT STORE FOOD, BEVERAGES OR TOBACCO PRODUCTS IN THE STORAGE AREA. PREVENT EATING, DRINKING, TOBACCO USAGE AND COSMETIC APPLICATION IN AREAS WHERE THERE IS A POTENTIAL FOR EXPOSURE TO THE MATERIAL. ALWAYS WASH THOROUGHLY AFTER HANDLING.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING. SAFETY SHOWER AND EYE BATH.
MECHANICAL EXHAUST REQUIRED.
AVOID INHALATION.

AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
PREVENT EATING, DRINKING, TOBACCO USAGE AND COSMETIC APPLICATION
IN AREAS WHERE THERE IS A POTENTIAL FOR EXPOSURE TO THE MATERIAL.
WASH THOROUGHLY AFTER HANDLING.
KEEP CONTAINER TIGHTLY CLOSED.
STORE IN A COOL DRY PLACE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: YELLOW ORANGE LIQUID
PHYSICAL PROPERTIES:
MELTING POINT: NOT APPLICABLE
BOILING POINT: NOT AVAILABLE
SPECIFIC GRAVITY: 1.05 g/cc at 20°C
VAPOR PRESSURE: NOT AVAILABLE
VAPOR DENSITY: NOT AVAILABLE

SECTION 10: STABILITY AND REACTIVITY

STABILITY: STABLE UNDER STANDARD CONDITIONS
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR
INCOMPATIBILITIES:
STRONG OXIDIZING AGENTS
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:
THERMAL DECOMPOSITION MAY PRODUCE CARBON MONOXIDE, CARBON
DIOXIDE, NITROGEN OXIDES, HYDROGEN FLUORIDE, HYDROGEN CHLORIDE
GAS.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES:
INGESTION: SLIGHTLY TOXIC
ORAL LD50 (RAT): 1,841 MG/KG BODY WEIGHT
DERMAL: SLIGHTLY TOXIC
DERMAL LD50 (RABBIT): >2,000 MG/KG BODY WEIGHT
INHALATION: SLIGHTLY TOXIC
INHALATION LD50 (RAT): >2.92 MG/L AIR - 4 HOURS
EYE CONTACT: MODERATELY IRRITATING (RABBIT)
SKIN CONTACT: MODERATELY IRRITATING (RABBIT)
SKIN SENSITIZATION: SENSITIZING (GUINEA PIG)
MUTAGENIC POTENTIAL:
FLUMETRALIN: NONE OBSERVED
REPRODUCTIVE HAZARD POTENTIAL:
FLUMETRALIN: NONE OBSERVED
CHRONIC/SUBCHRONIC TOXICITY STUDIES:
LIVER, BLOOD AND SPLEEN TOXICITY OCCURRED AT THE HIGHEST DOSE
LEVEL (DOGS). EFFECTS ON LIVER (RATS).
CARCINOGENIC POTENTIAL:
FLUMETRALIN: NONE OBSERVED
TOXICITY OF OTHER COMPONENTS:
PETROLEUM SOLVENT: SUPPLIER STATES THAT INHALATION OF VAPORS
AT HIGH CONCENTRATIONS CAN CAUSE CENTRAL NERVOUS SYSTEM
EFFECTS (DIZZINESS, HEADACHE) IRRITATION TO EYES OR
RESPIRATORY TRACT. SKIN EXPOSURE CAN CAUSE DEFATTING WITH

RESULTING DERMATITIS. DAMAGE TO THE STOMACH, LIVER, THYROID AND URINARY BLADDER FOR HIGH ORAL DOSES IN RATS, HOWEVER, THE MANUFACTURER STATES THAT THESE EFFECTS ARE NOT RELEVANT TO HUMANS AT OCCUPATIONAL LEVELS OF EXPOSURE.

SURFACTANT: MAY CAUSE IRRITATION TO THE EYES, SKIN AND RESPIRATORY SYSTEM.

TARGET ORGANS

FLUMETRALIN: BLOOD, LIVER AND SPLEEN

PETROLEUM SOLVENT: RESPIRATORY TRACT, STOMACH, LIVER, THYROID, URINARY BLADDER, CENTRAL NERVOUS SYSTEM AND SKIN.

SURFACTANT: EYES, SKIN AND RESPIRATORY SYSTEM.

SECTION 12: ECOLOGICAL INFORMATION

FLUMETRALIN:

BIRDS: LD50 (BOBWHITE QUAIL AND MALLARD DUCKLINGS) > 2,000 MG/KG
LD50 (MALLARD DUCKLINGS) > 5,000 PPM

FISH: TOXIC TO FISH

LC50 (BLUEGILL AND TROUT) > 3.2 MICROGRAM/L

BEEES: NON-TOXIC

DAPHNIA: EC50 (48H) > 2.8 MICROGRAM/L

SELENASTRUM: EC50 > 0.85 MG/L

SECTION 13: DISPOSAL CONSIDERATIONS

PESTICIDE WASTES ARE ACUTELY HAZARDOUS. IMPROPER DISPOSAL OF EXCESS PESTICIDE, SPRAY MIXTURE OR RINSATE IS A VIOLATION OF FEDERAL LAW. IF THESE WASTES CANNOT BE DISPOSED OF BY USE ACCORDING TO LABEL INSTRUCTIONS, CONTACT YOUR STATE PESTICIDE OR ENVIRONMENTAL CONTROL AGENCY OR THE HAZARDOUS WASTE REPRESENTATIVE AT THE NEAREST EPA REGIONAL OFFICE FOR GUIDANCE. OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14: TRANSPORT INFORMATION

DOT CLASSIFICATION:

CONTAINERS <119 GALLONS OR <714 POUNDS: NOT REGULATED

CONTAINERS >119 GALLONS OR >714 POUNDS:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., Class 9, UN3082, III, MARINE POLLUTANT

INTERNATIONAL TRANSPORTATION:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., CLASS 9, UN3082, III, MARINE POLLUTANT,

B/L FREIGHT CLASSIFICATION:

PLANT GROWTH INHIBITOR, MODIFIER, OR REGULATOR.

SECTION 15: REGULATORY INFORMATION

SARA TITTLE III CLASSIFICATION:

SECTION 311/312: ACUTE HEALTH HAZARD, CHRONIC HEALTH HAZARD

SECTION 313 CHEMICALS:

FLUMETRALIN (13.7%) (CAS # 62624-70-3)

GLYCOL ETHERS (CAS # MIXTURE)

PROPOSITION 65: NOT APPLICABLE
CERCLA REPORTABLE QUANTITY (RQ)
CONTAINS GYCOL ETHERS CERCLA RQ = 936 LBS IN FORMULATION.
RCRA CLASSIFICATION: NOT APPLICABLE
TSCA STATUS: EXEMPT FROM TSCA, SUBJECT TO FIFRA

SECTION 16: OTHER INFORMATION

NFPA HAZARD RATINGS:
HEALTH: 2 (MODERATE)
FLAMMABILITY: 1 (SLIGHT)
REACTIVITY: 0 (LEAST)

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL-INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SRM CHEMICAL LTD. CO. SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.