

Syngenta Crop Protection Canada, Inc.

MATERIAL SAFETY DATA SHEET

MATADOR 120EC

03-09-18 (Y/M/D)

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company : Syngenta Crop Protection Canada, Inc.
140 Research Lane
Guelph, Ontario
N1G 4Z3
Phone number : (519) 836-5665
Emergency phone : 1-800-327-8633 (1-800-FASTMED)
Fax : (519) 823-0504
Name used on label : MATADOR 120 EC
Product use : Insecticide
Formulation Number : A12975A
Registration Number : 24984

A Registered Trade Mark of a Syngenta group company.

Section 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Identity	CAS-no.	Typical %	Other information
Lambda-cyhalothrin	91465-08-6	12 .. 16 % w/w	
Petroleum solvent naptha, light aromatics	64742-95-6	30 .. 40 % w/w	
1,2,4-trimethylbenzene	95-63-6	5 .. 15 % w/w	
xylene(mix)	1330-20-7	5 .. 15 % w/w	

Ingredients not precisely identified are proprietary or non hazardous.
Values are not product specifications.

Section 3 - HAZARDS IDENTIFICATION

Physical hazards:

Combustible liquid

Health hazards:

Toxic by inhalation, in contact with skin and if swallowed. May cause sensitisation by skin contact.

Section 4 - FIRST AID MEASURES

GENERAL ADVICE:

If you feel unwell, seek medical advice (show the label where possible).
IF IN EYES: Immediately flush eyes with running water for a minimum of 20 minutes. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention immediately.

IF ON SKIN:

Flush skin with running water for a minimum of 20 minutes. Start flushing while removing contaminated clothing. If irritation persists, repeat flushing. Obtain medical attention immediately.

IF SWALLOWED:

Provided the patient is conscious, wash out mouth with water. Immediately contact Syngenta's Emergency Information Network at 1-800-F-A-S-T-M-E-D (327-8633). Do not induce vomiting. Vomiting should only be induced under the direction of a physician or a poison control center. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer water. Immediately transport victim to an emergency facility.

IF INHALED:

Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is labored, give oxygen. Obtain immediate medical attention.

MEDICAL ADVICE:

This product contains materials that may cause severe pneumonitis if aspirated. If ingestion has occurred less than 2 hours earlier, carry out careful gastric lavage; use endotracheal cuff if available, to prevent aspiration. Observe patient for respiratory difficulty from aspiration pneumonitis. Give artificial resuscitation and appropriate chemotherapy if respiration is depressed. Symptomatic treatment and supportive therapy as indicated.

Section 5 - FIRE FIGHTING MEASURES

Flash point : 46 °C
Flammable limits (LEL) : 1 %
Flammable limits (UEL) : 6 %
Autoignition temperature : Not available. (345 Deg. C. solvent)
Decomposition temperature : Not available.

EXTINGUISHING MEDIA:

Foam, carbon dioxide, water or dry chemical. Use water as a spray or fog; avoid use of water jet. Water spray should be used to cool containers.

PROTECTIVE EQUIPMENT:

Self-contained breathing apparatus with full face-piece and protective clothing

Unusual fire and explosion hazards:

Heavy vapors can flow along surfaces to distant ignition sources and flash back.

Section 6 - ACCIDENTAL RELEASE MEASURES

METHODS FOR CLEANING UP:

Generously cover the contaminated areas with common, household detergent (e.g. TIDE, registered trademark of Proctor and Gamble Co.). Using a stiff brush and small amounts of water, work the detergent into the remaining spilled material forming a slurry. Brush the slurry into cracks and crevices and allow to stand for 2-3 minutes. Be careful to completely avoid skin or eye contact. Do not splatter on oneself or bystanders. Soak up liquid with absorbent and shovel into waste container. Remove as much as possible by absorbing with inert material. Remove any contaminated soil. Place in closed, labeled containers and store in a safe place to await disposal. Seal drum and dispose of contaminated material in a facility permitted for hazardous waste. Large spills should be handled according to a spill plan.

Section 7 - HANDLING AND STORAGE

SAFE HANDLING ADVICE:

Avoid breathing vapors or spray mist. Use normal good industrial hygiene and housekeeping practices.

REQUIREMENTS FOR STORAGE ROOMS:

Keep in original containers, tightly closed and locked up. Keep out of the reach of children and away from food.

STOREAGE TEMPERATURE:

Ideal storage temperature is 10-27 Deg. C. Do not expose sealed containers to temperatures above 40 Deg. C.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

OSHA PEL 1,2,4-trimethylbenzene

TWA 25 ppm

ACGIH TLV 1,2,4-trimethylbenzene

TWA 25 ppm

ACGIH TLV xylene (mix)

8 hour TWA 100 ppm

8 hour STEL 150 ppm

8 HOUR OSHA PEL 100 ppm

Syngenta Standard Lambda-cyhalothrin

Dermal

TWA 0.4 mg/m³

OES/HSE Petroleum solvent naptha, light aromatics

8 hr TWA 50 ppm

ENGINEERING CONTROLS:

If needed, use local exhaust to keep exposures to a minimum.

EYE PROTECTION:

Eye contact with the material should be avoided through the use of chemical safety glasses, goggles or a face-shield, selected in regard to exposure potential.

BODY PROTECTION:

Protective clothing as needed, impervious gloves, apron and arm covers.

RESPIRATORY PROTECTION:

Use MSHA-NIOSH approved respirator for pesticides. Should exposure potential under poor conditions become greater, use a positive-pressure, air-supplied respirator.

OTHER PROTECTIVE EQUIPMENT:

Eyewash station and safety shower in work area

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form	: liquid
Formulation Type	: Emulsifiable Concentrate
Color	: pale yellow
odor	: petroleum solvent.
Boiling point	: > 96 °C
Freezing temperature	: < - 35°C
Vapor Pressure	: 1.5×10^{-9} mmHg @ 20°C (lambda-cyhalothrin technical)
pH-value	: 5.9 (5% suspension in water)
Specific gravity	: 0.91
Viscosity	: 0.8 cps
Evaporation Rate	: Not available.
Vapour density	: Not available.
Solubility in water	: 0.004 mg/L (lambda-cyhalothrin technical)
Threshold odour	: Not available.

Section 10 - STABILITY AND REACTIVITY

HAZARDOUS REACTIONS (CONDITIONS TO AVOID)

Stability : Stable at room temperature.
Incompatibility : Strong oxidizing agents. Acids and alkaline materials.
Hazardous polymerization : Will not occur.
Conditions to avoid: Keep away from heat and sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition products are toxic and may include hydrocarbons, ammonia, organic and acid halides, oxides of carbon, nitrogen and sulphur.

Section 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY (LETHAL DOSES)

LD50 Oral female rats: approx 110 mg/kg

Additional inform. : Irritant and can cause nausea and vomiting.

LD50 Oral male rats: approx 64 mg/kg

Additional inform. : Irritant and can cause nausea and vomiting.

LD50 Dermal rat: > 1800 mg/kg

Additional inform. : Moderate/severe irritant to rabbit skin. In humans may cause tingling or numbness in exposed area (paraesthesia). The effect may result from splash, aerosol or transfer to the face from contaminated gloves and hands. This effect is transient, lasting up to 24 hours. There is no evidence of any long term or cumulative effects following repeated contamination. Repeated and/or prolonged contact may cause skin sensitisation.

LC50 Inhalation

female rats: 175 mg/m³/4H

male rats: 315 mg/m³/4H

Additional inform.: High concentrations of vapour are irritant to the respiratory tract.

Other Toxicity Inform.: Material is unlikely to produce vapor or mist in transportation and be hazardous by inhalation.

ACUTE TOXICITY (IRRITATION, SENSITIZATION ETC.)

Eye contact Results: SEVERE IRRITANT

GENERAL INFORMATION ABOUT ACUTE OR OTHER TOXICITIES

General information

Pyrethroids may produce non-specific symptoms such as nausea, vomiting, abdominal pain and diarrhea. Large doses may cause disturbance of the nervous system with tremors, ataxia, weakness of limbs, convulsions, coma, and death from respiratory depression. Dermal contact with Pyrethroids in the facial area may cause a subjective sensation of tingling or numbness (paraesthesia). There is no evidence of any long-term or cumulative effects on the skin. Aromatic Hydrocarbons cause bone marrow depression and increase the fragility of red blood cells. Sensitisation of the heart muscle can occur, but it is very rare. Sensitisation is the process whereby a biological change occurs in the individual because of previous exposure to a substance and, as a result, the individual reacts more strongly when subsequently exposed to the substance. Once sensitised, an individual can react to extremely low airborne levels, even below the TLV, or to skin contact. Peripheral neuropathy is a progressive disorder of the nervous system characterized by sensory and motor abnormalities, muscle spasms, weakness and pain in the arms and legs, numbness and tingling of the fingers and toes and

paralysis. The ingredient(s) of this product is (are) not classified as carcinogenic by ACGIH or IARC, not regulated as carcinogens by OSHA and not listed as carcinogens by NTP. There is no evidence of mutagenic potential. There is also no evidence of adverse reproductive effects, teratogenicity or fetotoxicity in the absence of maternal toxicity.

Section 12 - ECOLOGICAL INFORMATION

ECOTOXICITY

Assessment: Highly toxic to aquatic life.
Additional inform.: Very toxic to bees.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Method:

Dispose of in facility permitted for hazardous waste. For additional details, contact the Provincial regulatory agency or the manufacturer.

Container disposal:

Empty container retains product residue. Triple rinse, or equivalent, empty container, return rinse water to dilution mixture, and dispose of dilution mixture as a hazardous waste if it cannot be disposed of by use according to label instructions. Do not reuse container. Offer it for recycling or reconditioning, or puncture and dispose of in properly permitted landfill.

Section 14 - TRANSPORT INFORMATION

TRANSPORT/ADDITIONAL INFORMATION Road (TDG) transport:

Proper Shipping Name: Pyrethroid pesticide, liquid, toxic, flammable
Class (Subclass) : 6.1 (3)
UN# : UN3351
P.G. : III

Section 15 - REGULATORY INFORMATION

HAZARDOUS INGREDIENTS

Lambda-cyhalothrin
Petroleum solvent naphtha, light aromatics
1,2,4-trimethylbenzene
xylene (mix)

Other regulations; restrictions and prohibitions

Pest Control Products (PCP) Act Registration No.: 24984

Section 16 -OTHER INFORMATION

The information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other and additional considerations. No warranty of any kind is given or implied and Syngenta will not be liable for any damages, losses, injuries or consequential damages which may result from the use of or reliance on any information contained herein. This Material Safety Data Sheet is valid for three years. This product is under the jurisdiction of the Pest Control Products Act and is exempt from the requirements for a WHMIS compliant MSDS. Hazardous properties of all ingredients have been considered in the preparation of this MSDS. Read the entire MSDS for the complete hazard evaluation of this product.

Prepared by: Syngenta Crop Protection Canada, Inc. (519) 836-5665

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