



MATERIAL SAFETY DATA SHEET

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Rev. Date: 06/14/2006
Approved Date: 03/15/2005
Supersedes: 07/29/2004

TRANSPORTATION EMERGENCY

CHEMTREC:(800)-424-9300

EMERGENCY AND PRODUCT INFORMATION

OHP, Inc.:(800)-356-4647

DECATHLON® 20 WP Greenhouse and Nursery Insecticide

EPA Registration Number: 432-1402-59807

I. CHEMICAL PRODUCT INFORMATION

PRODUCT NAME: Decathlon® 20 WP
Greenhouse and Nursery Insecticide
CHEMICAL FAMILY: Pyrethroid Insecticide
PRODUCT USE: Broad-spectrum insecticide
for the control of crawling, flying, and other insect pests
for indoor and outdoor uses.

II. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS No.	% Average by Weight
Cyfluthrin	68359-37-5	20.00
Quartz (Silica, Crystalline)	14808-60-7	4.00

III. HAZARDS IDENTIFICATION

NOTE: Please refer to Section XI for detailed toxicological information.

Emergency Overview Caution! Harmful if swallowed, inhaled or absorbed through the skin. Irritating to eyes. Keep out of reach of children and domestic animals. Avoid breathing dust or spray mist.

Physical State: Solid Powder
Odor: Aromatic
Appearance: Tan
Routes of Exposure: Inhalation, Skin Absorption,
Eye contact, Skin contact

IMMEDIATE EFFECTS

Eye: Wear protective eyewear.
Do not get in eyes. Mild eye irritation
Skin: Mild skin irritant. May
cause a transient, localized paresthesia, characterized
by tingling, burning or numbness sensation in some
individuals.
Ingestion: Harmful if swallowed.
Inhalation: Irritation of mucous mem-
branes. Avoid breathing dust or spray mist. Mist may
cause irritation involving the nose, throat and upper
respiratory tract during the end use of the product
such as during a spray application.

CHRONIC OR DELAYED

LONG-TERM: This product is not listed as
a carcinogen by ACGIH, NTP IARC or OSHA. However,
it may contain crystalline silica (quartz), a substance
which has been listed as a naturally-occurring mineral
component of many sands and clays. Although the car-
cinogenic potential of crys-talline silica in humans in
controversial, it must be considered if it is inhaled under
excessive exposure conditions. The respirable portion
of the silica that may be contained in this product, how-
ever, is small, such that excessive inhalation expo-sure
during anticipated conditions of use is unlikely.

MEDICAL CONDITIONS

AGGRAVATED

BY EXPOSURE: No specific medical condi-
tions are known which may be aggravated by exposure
to this product. As with all materials which can cause
upper respiratory tract irritation, persons with a history
of asthma, emphysema, or hyperreactive airways dis-
ease may be more susceptible to over exposure.
Plumonary and respiratory diseases may be aggravated
by exposure to respirable crystalline silica.

IV. FIRST AID MEASURES

General: Have the product con-
tainer or label with you when calling a poison control
center or doctor or going for treatment.
Eye: Hold eye open and rinse
slowly and gently with water for 15-20 minutes. Remove
contact lenses, if present, after the first 5 minutes, then
continue rinsing eye. Call a poison control center or
doctor for treatment advice.
Skin: Take off all contaminated
clothing immediately. Wash off immediately with plenty
of water for at least 15 minutes. Call a poison control
center or doctor for treatment advice.
Ingestion: Call a poison control
center or doctor immediately for treatment advice.
Have person sip a glass of water if able to swallow. DO
NOT induce vomiting unless directed to do so by a
physician or poison control center. Do not give any-
thing by mouth to an unconscious or convulsing person.
Inhalation: Move to fresh air. If per-
son is not breathing, call 911 or an ambulance, then
give artificial respiration, preferably mouth-to-mouth if
possible. Call a poison control center or doctor for
treatment advice.
Notes to Physician
Treatment: Treat Symptomatically.
There is no specific antidote.

V. FIRE FIGHTING MEASURES

Flash point: Not applicable
Autoignition Temperature: Not combustible
Suitable Extinguishing Media: Water, Dry chemical
Fire Fighting Instructions: Stay upwind if possible.
Firefighters should wear NIOSH approved self-con-
tained breathing apparatus and full protective clothing.

VI. ACCIDENTAL RELEASE MEASURES

Methods for Cleanup: Isolate hazard area. Wear
appropriate gear for the situation. See Personal
Protection Information in Section VIII. Sweep up and

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shovel into suitable containers for disposal. Do not allow spilt product to enter soil or waterways. Do not enter confined spaces unless adequately ventilated.

Clean contaminated floors and objects thoroughly with water and detergent, observing environmental regulations. Decon-taminate tools and equipment following cleanup.

VII. HANDLING AND STORAGE

Handling Procedures: Wash with soap and water after handling. Avoid breathing dust.

Storing Procedures: Keep away from living quarters. Keep away from open flames, hot surfaces and sources of ignition. Store in an area that is away from food, feedstuffs, fertilizers and seed, away from the home or home garden.

Store in an area that is dry and well-ventilated.

Min / Max Storage

Temperatures: 60 day average not to exceed 120° F.

VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Ensure adequate ventilation, especially in confined areas. Provide exhaust ventilation.

Control airborne concentrations below the exposure guidelines.

Eye/Face Protection: Chemical resistant goggles must be worn.

Hand Protection: Chemical resistant gloves.

Body Protection: Long-sleeved shirt and long pants. Shoes plus socks.

Respiratory Protection: When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

Exposure Limits

Quartz (Silica, Crystalline) 14808-60-7	ACGIH	TWA	0.05 mg/m3
	Form of Exposure	Respirable fraction.	
	ACGIH NIC	TWA	0.025 mg/m3
	Form of Exposure	Respirable fraction.	
	NIOSH	REL	0.05 mg/m3
	Form of Exposure	Respirable dust.	
	OSHA Z1A	TWA	0.1 mg/m3
	Form of Exposure	Respirable dust.	
	US CA OEL	TWA PEL	0.1 mg/m3
	Form of Exposure	Respirable dust.	
	US CA OEL	TWA PEL	0.3 mg/m3
	Form of Exposure	Total dust.	
	OSHA Z1PEL		15 mg/m3
	Form of Exposure	Total dust.	
	OSHA Z1PEL		5 mg/m3
	Form of Exposure	Respirable fraction.	
	Z3	TWA	2.4 millions of particles per cubic foot of air.

Form of Exposure Respirable.

Remarks The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.

Z3 TWA 0.1 mg/m3

Form of Exposure Respirable.

Remarks The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.

Z3 TWA 0.3 mg/m3

Form of Exposure Total dust.

Remarks The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Tan

Physical State: Solid Powder

Odor: Aromatic

pH: 9.2 (as aqueous solution)

Vapor Pressure: >0.0000001 h Pa at 20° C

Bulk Density: 20 - 26 lbs. / cu. - ft.

Water Solubility: No data available

X. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Exposure to extreme heat. Exposure to moisture.

Incompatibility: Methanol, Alkali metals, Alkaline earth metals, Light and/or alkaline metals, Bases

Hazardous Polymerization: Will not occur.

XI. TOXICOLOGICAL INFORMATION

Only acute toxicity studies have been performed on this product as formulated. The non-acute information pertains to the active ingredient, cyfluthrin.

Acute Oral Toxicity: Male Rat: LD50: 3,084 mg/kg
Female Rat: LD50: 1,733 mg/kg

Acute Dermal Toxicity: Male/Female Rabbit
LD50: > 2,000 mg/kg

Acute Inhalation Toxicity: Male/Female Rat: LC50: 4-hr exposure to dust: >1.18 mg/l Maximum attainable concentration. (actual)

Male/Female Rat: 1-hr exposure to dust. (extrapolated from 4-hr LC50); > 4.72 mg/l (actual)

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Skin Irritation: Rabbit: slight irritation

Eye Irritation: Rabbit: Mild eye irritation

Sensitization: Guinea pig: non-sensitizing

Subchronic Toxicity: In a 3-week dermal toxicity study in rats treated with cyfluthrin, effects observed included clinical signs of toxicity, as well as, topical and microscopic alterations in the treated tissue at the dose site.
In a 13 week inhalation study in rats exposed to cyfluthrin, effects included reduced body weight gains and non-specific behavioral disturbances at the mid- and high concentrations (0.71 and 4.5 mg/cu-m).

Chronic Toxicity: In chronic dietary studies in rats treated with cyfluthrin, compound-related effects included decreased body weight gains and slight changes in clinical chemistries.
In chronic dietary studies in dogs treated with cyfluthrin, compound-related effects were observed at the higher concentrations (>360 ppm). These effects included an increased incidence of vomiting, decreased body weights, soft feces and clinical neurological symptoms.

Assessment Carcinogenicity: In oncogenicity studies in rats and mice, cyfluthrin was not considered carcinogenic in either species.

ACGIH
Crystalline Silica (Quartz) 14808-60-7 Group A2

NTP
Crystalline Silica (Quartz) 14808-60-7

IARC
Crystalline Silica (Quartz) 14808-60-7 Overall evaluation: 1

OSHA
None

Reproductive & Developmental Toxicity: REPRODUCTIVE TOXICOLOGY: In reproduction studies in rats treated with cyfluthrin, reproductive effects occurred in conjunction with parental toxicity. These effects included reductions in viability, lactation, litter size, feed consumption and body weights. In addition, coarse tremors were observed in offspring at higher concentrations (ca. 125 ppm).
DEVELOPMENTAL TOXICITY: In developmental toxicology studies in rats treated with cyfluthrin, there were no embryotoxic or teratogenic effects via the oral route of exposure. When rats were exposed to cyfluthrin via inhalation, embryotoxic effects occurred in conjunction with maternal toxicity. In rabbits treated orally with cyfluthrin, there was an increased incidence of post implantation losses at maternally toxic dose levels.

Neurotoxicity: In neurotoxicity studies with cyfluthrin, minimal nerve damage occurred in rats and hens treated by oral gavage. In dermal and inhalation studies, which are more relevant to field exposure, there was no evidence of delayed neurotoxicity in hens treated with cyfluthrin.
In a special investigative inhalation study with cyfluthrin in neonatal mice, effects observed included clinical signs of toxicity, mortality and neurobehavioral effects indicative of treatment-related hyperactivity. There were no correlation morphological changes in neural tissues in mice at 4 months of age.

Mutagenicity: Numerous in vitro and in vivo mutagenicity studies have been conducted on cyfluthrin, all of which are negative.

XII. ECOLOGICAL INFORMATION

Environmental Precautions: This pesticide is toxic to fish and aquatic organisms. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark outside of a treated rice field. Drift and runoff from treated areas may be hazardous to fish/aquatic organisms in adjacent sites. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product only as specified on the label.
This product is highly toxic to bees exposed to direct treatment of residues on blooming crops or weeds. Do not apply it or allow it to drift to crops or weeds on which bees are actively foraging.

XIII. DISPOSAL CONSIDERATIONS

General Disposal Guidance

Pesticide Disposal: Do not contaminate water, food, or feed by disposal. Pesticide, spray mixture or rinse water that cannot be used according to label instructions maybe disposed of at an approved waste facility. Pesticide wastes are acutely toxic hazardous. Keep away from food, drink and animal feeding stuffs. Do not re-use empty containers.

Container Disposal: Packaging that cannot be cleaned should be disposed of as product waste. Uncontrolled disposal or recycling of this packaging is not permitted and can be dangerous.

XIV. TRANSPORT INFORMATION

DOT CLASSIFICATION:: Not regulated for Domestic Surface Transportation

XV. REGULATORY INFORMATION

EPA Registration No.: 432-1402-59807

US Federal Regulations

TSCA list

Quartz (Silica, Crystalline) 14808-60-7

US Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

None

SARA Title III - section 302 - notification and information

None

SARA Title III - section 313 - toxic chemical release reporting

Cyfluthrin 68359-37-5 1.0%

US States Regulatory Reporting

CA Prop65

This product contains a chemical known to the State of California to cause cancer.

Quartz (Silica, Crystalline) 14808-60-7

This product does not contain any substances known to the State of California to cause reproductive harm.

US State right-to-know ingredients

Cyfluthrin 68359-37-5 NJ

Quartz (Silica, Crystalline) 14808-60-7 IL, MA, MN, RI

Canadian Regulations

Canadian Domestic Substance List

Quartz (Silica, Crystalline) 14808-60-7

Environmental

CERCLA

None

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Clean Water Section 307 Priority Pollutants

None

Safe Drinking Water Act Maximum Contaminant Levels

None

XVI. OTHER INFORMATION

	Health	Flammability	Reactivity	Others
NFPA	2	1	1	None

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard,
3 = severe hazard, 4 = extreme hazard

Reason to Revise: -3/15/2005

This information is provided in good faith but without express or implied warranty. Buyer assumes all responsibility for safety and use not in accordance with label instructions.

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