

SUMITOMO CHEMICAL

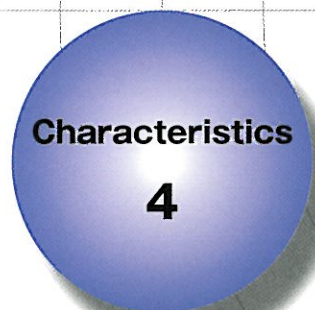


Pleio[®]

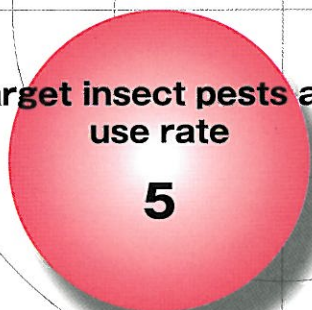




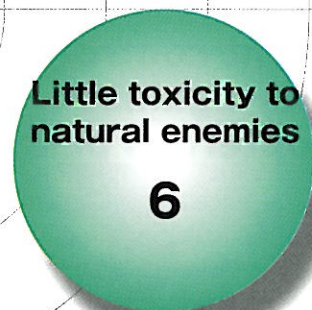
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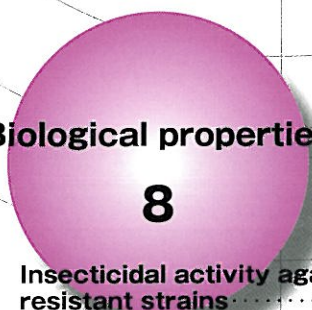
**Target insect pests and
use rate**



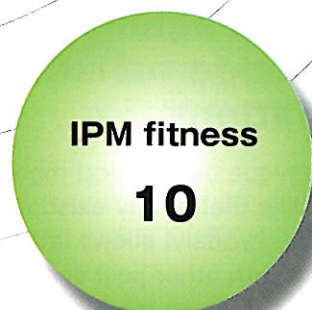
**Little toxicity to
natural enemies**



Biological properties



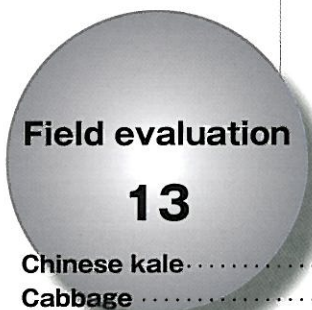
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Pyridalyl ensures superb control of lepidopterous pests at low rates.

Target Insect Pests and Use Rate



Cluster caterpillar
Spodoptera litura



Cabbage armyworm
Mamestra brassicae



Diamondback moth
Plutella xylostella



Cotton leafworm
Spodoptera littoralis

■ Pyridalyl exhibits impressive pest control efficacy at low rates.

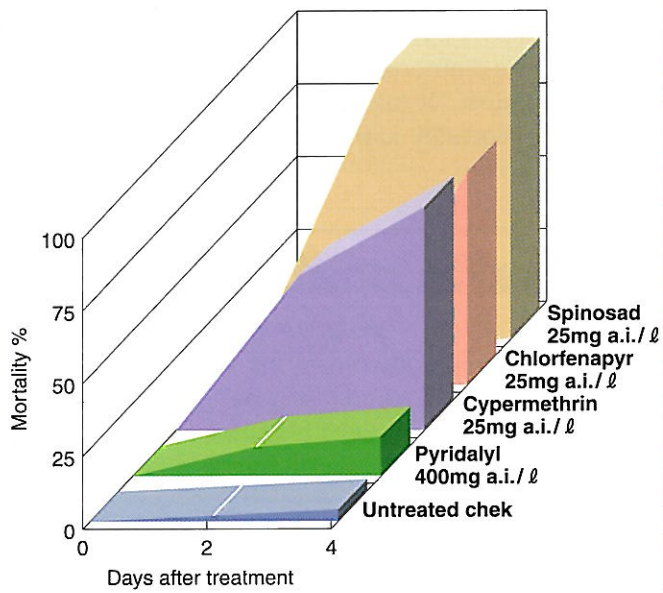
Crop	Insect Pests		Use Rate
	Common Name	Scientific Name	
Vegetables	Bollworm	<i>Helicoverpa armigera</i>	100~220g a.i./ha
	Tomato fruitworm	<i>Helicoverpa zea</i>	
	Tobacco budworm	<i>Heliothis virescens</i>	
	Cabbage armyworm	<i>Mamestra brassicae</i>	
	Common cabbage worm	<i>Pieris rapae</i>	
	Diamondback moth	<i>Plutella xylostella</i>	
	Southern armyworm	<i>Spodoptera eridania</i>	
	Beet armyworm	<i>Spodoptera exigua</i>	
	Cluster caterpillar	<i>Spodoptera litura</i>	
	Tomato moth	<i>Tuta absoluta</i>	
Cotton	Cotton bollworm	<i>Helicoverpa armigera</i>	100~220g a.i./ha
	Native bollworm	<i>Helicoverpa punctigera</i>	
	Corn earworm	<i>Helicoverpa zea</i>	
	Tobacco budworm	<i>Heliothis virescens</i>	
	Beet armyworm	<i>Spodoptera exigua</i>	
	Fall armyworm	<i>Spodoptera frugiperda</i>	
	Cluster caterpillar	<i>Spodoptera litura</i>	
Cotton leafworm	<i>Spodoptera littoralis</i>		
Tobacco	Tobacco hornworm	<i>Manduca sexta</i>	100~220g a.i./ha
	Tobacco budworm	<i>Heliothis virescens</i>	

Little Toxicity to Bees



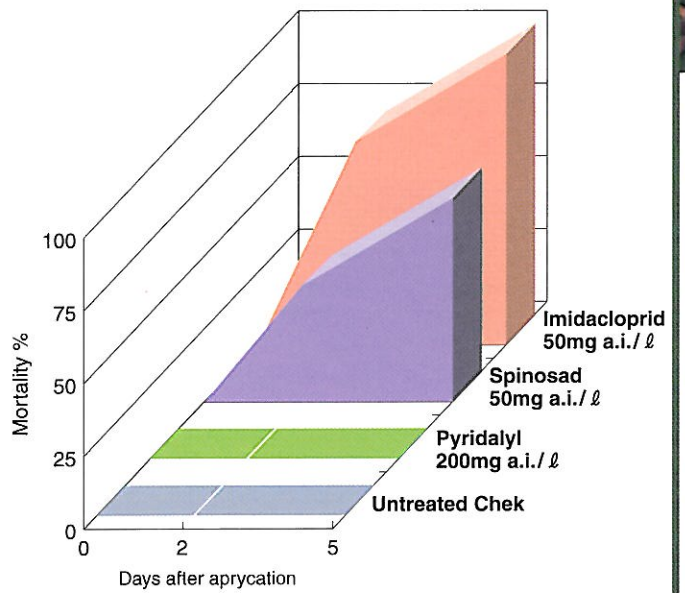
Pyridalyl is less toxic to honey and bumble bees.

■ Toxicity to honey bee (worker)



Method:
The test solution prepared by diluting the product with water was directly sprayed to 30 caged bees. Control group was sprayed with water.

■ Toxicity to bumble bee (worker)



Method:
The test solution prepared by diluting the product with water was directly sprayed to 30 caged bees. Control group was sprayed with water.



Honey bee

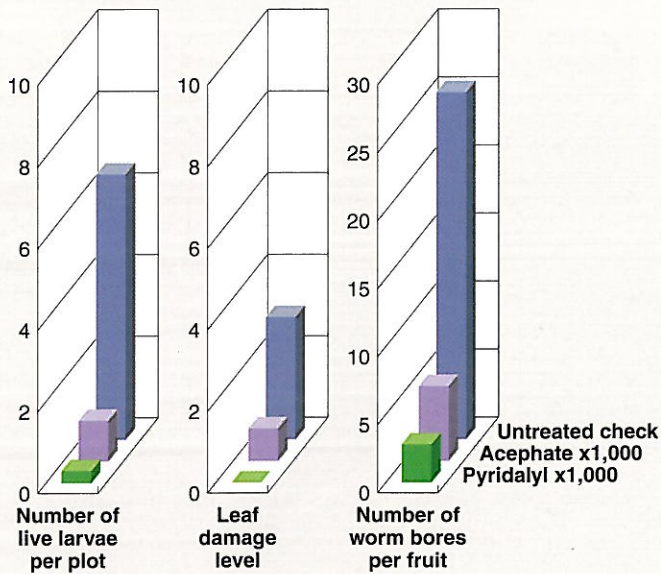


Bumble bee



Fruit protection effect

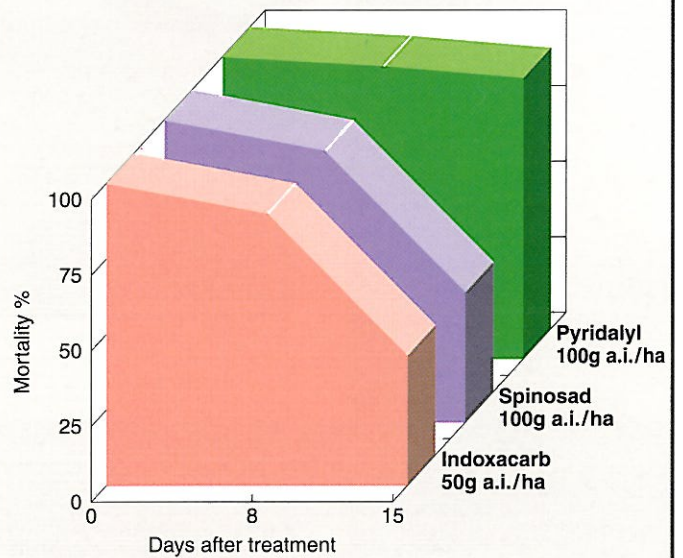
Pyridalyl has not only excellent insecticidal activity but also outstanding fruit protection effects, as shown by the results of numerous field trials on fruiting vegetables and cotton.



Crop: Eggplant
 Insect: Bollworm (*Helicoverpa armigera*),
 3rd-instar larvae
 Method: Leaf dip

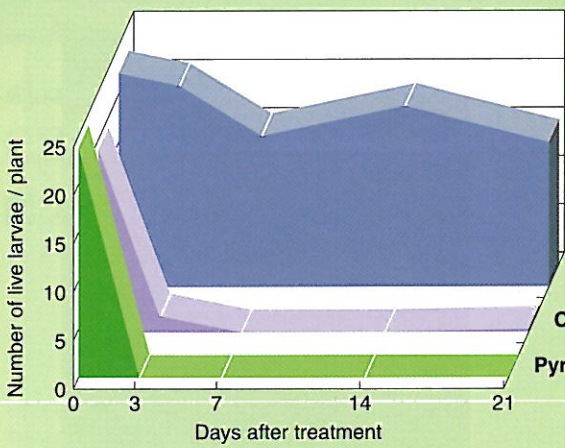
Rain fastness

Pyridalyl shows excellent rain tolerance and residual activity against diamondback moth larvae on cabbage.



Crop: Cabbage (4-5 leaf stage)
 Insect: Diamondback moth (*Plutella xylostella*),
 3rd-instar larvae
 Method: Foliar spray (50ml/3 plants)
 Plants were treated with artificial rainfall (20mm for 1 hour) after spraying, and then dried and kept in greenhouse before insects were released.

■ *Spodoptera litura*



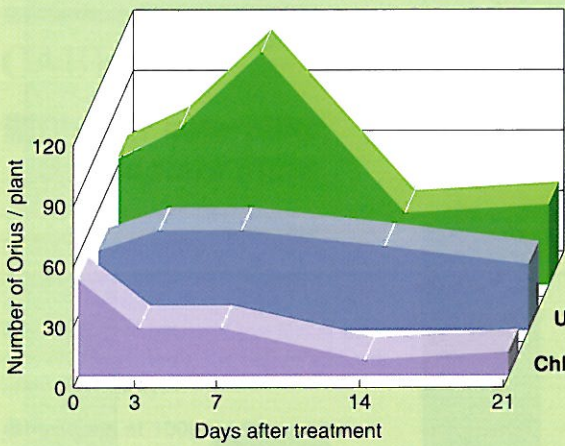
Spodoptera litura

Untreated check

Chlorfluazuron

Pyridalyl

■ *Orius strigicollis*



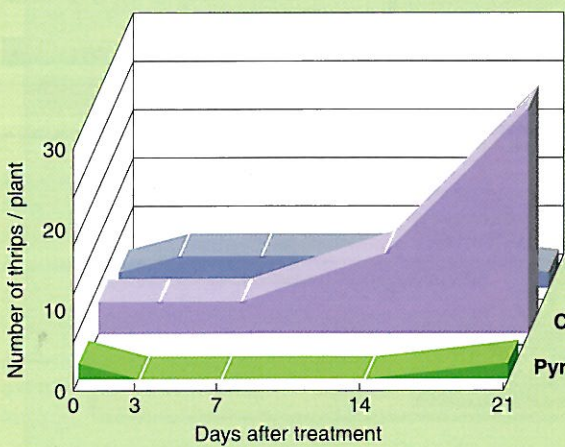
Orius sp.

Pyridalyl

Untreated check

Chlorfluazuron

■ *Thrips palmi*



Thrips palmi

Untreated check

Chlorfluazuron

Pyridalyl



Location: Kochi, Japan (2002)
 Crop: Green pepper (greenhouse)
 Date of application: June 17

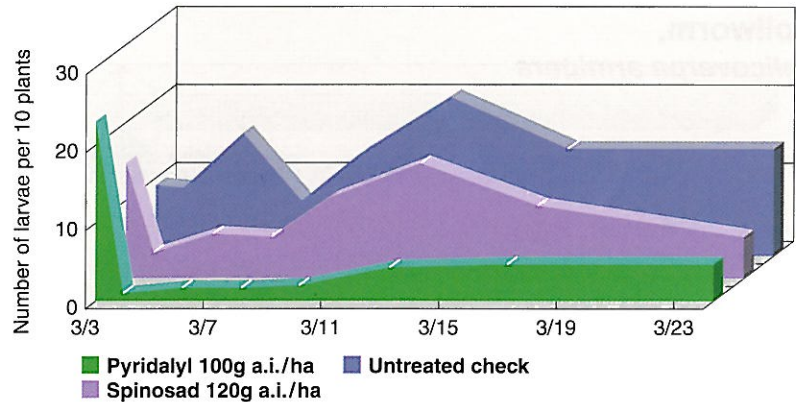
Field Evaluation

CHINESE KALE

■ Diamondback moth, *Plutella xylostella*

Location: Thailand (2002)
 Spray volume: 1000 l /ha
 Application date: March 3

● Pyridaly! at 100g a.i./ha exhibited excellent residual control of diamondback moth.

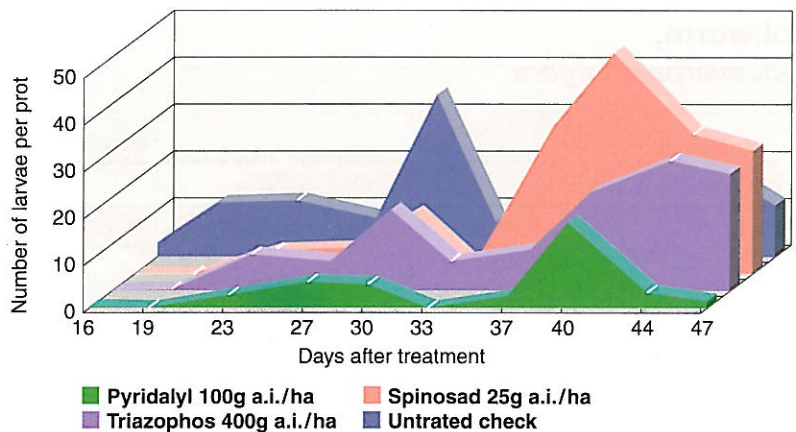


CABBAGE

■ Cluster caterpillar, *Spodoptera litura*

Location: Philippines (2002)
 Spray volume: 500 l /ha
 Application: 8 sprays with 7-day intervals. 1st spraying 13 days after transplanting.
 Evaluation: Number of live larvae on each plot was recorded 1 day before and 3 days after each spray.

● Pyridaly! at 100g a.i./ha exhibited excellent control of cluster caterpillar by scheduled sprays at 7-day intervals.

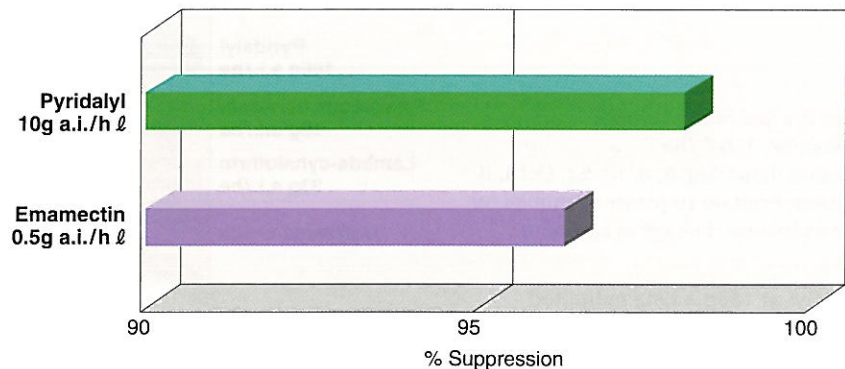


LETTUCE

■ Common cutworm, *Spodoptera litura*

Location: Japan (2002)
 Spray volume: 2000 l /ha
 Application: One spray May 29.
 Evaluation: Number of live larvae on each plot was recorded immediately before and 3 days after application

● Pyridaly! at 100g a.i./h l exhibited excellent control of common cutworm on lettuce.

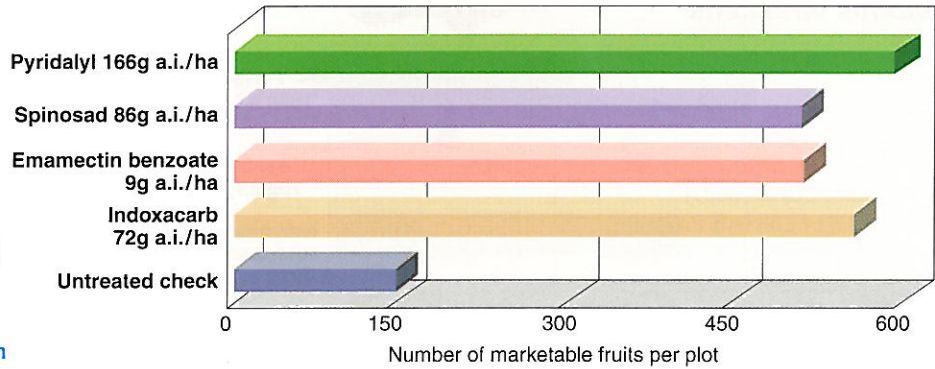




■ **Southern armyworm,**
Spodoptera eridania

Location: United States (2001)
 Spray volume: 610-812 ℓ /ha
 Application dates: Oct.22, 29; Nov.5, 13,
 20,28 Evaluation: Number of marketable
 fruit on 10 plants recorded Dec. 1.

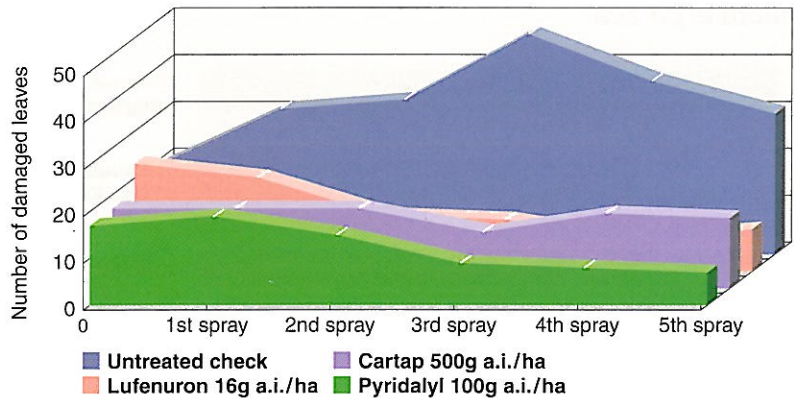
● Pyridalyl at 166g a.i./ha showed
 excellent fruit protection from southern
 armyworm.



■ **Tomato moth,**
Tuta absoluta

Location: Brazil (2001)
 Spray volume: 400 - 600 ℓ /ha
 Application dates: Sep.6, 13, 20, 27; Oct.4
 Evaluation: Number of infested leaves per
 plot was recorded 7 days after each spray.

● Pyridalyl at 100g a.i./ha showed
 excellent control of infestation by tomato
 moth.

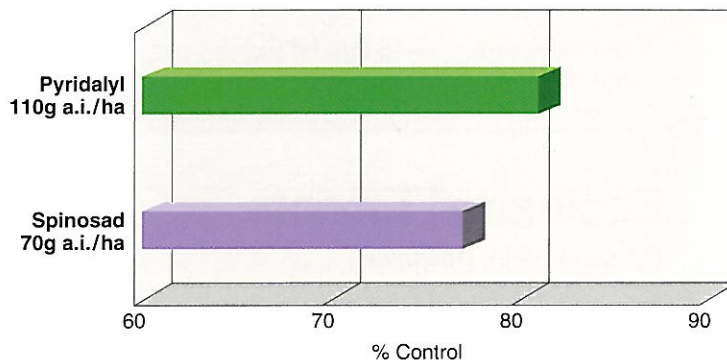




Beet armyworm,
Spodoptera exigua

Location: United States (1998)
 Spray volume: 94 l /ha
 Application dates: Aug. 5, 12, 19
 Evaluation: Number of live larvae in 10 ft from a row per plot recorded Aug. 1.

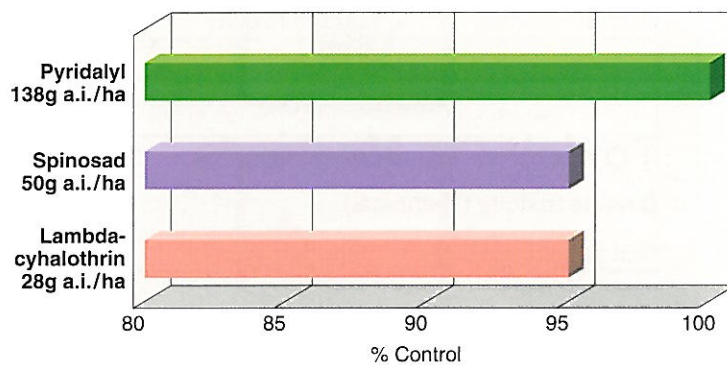
● Pyridalyl at 110g a.i./ha provided excellent efficacy for controlling beet armyworm.



Fall armyworm,
Spodoptera frugiperda

Location: United States (1998)
 Spray volume: 94 l /ha (10g a.i./acre)
 Application dates: Jul. 17, 27
 Evaluation: Number of live larvae in 10 ft from a row per plot recorded Aug. 3.

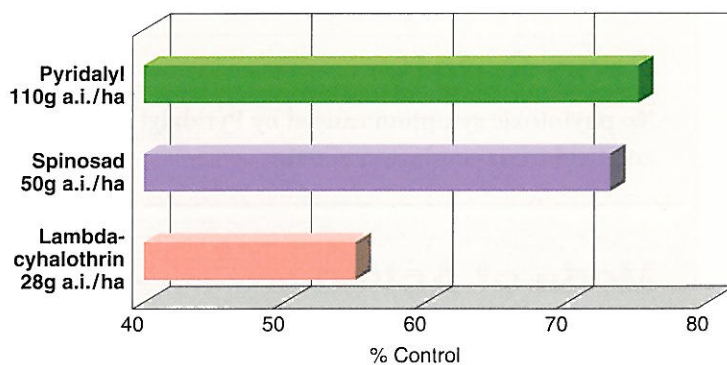
● Pyridalyl at 138g a.i./ha showed excellent control of fall armyworm.



Cabbage looper,
Trichoplusia ni

Location: United States (1998)
 Spray volume: 94 l /ha (10 g a.i. /acre)
 Application dates: Aug.5, 12, 19, 24
 Evaluation: Number of live larvae in 10 ft from a row per plot recorded Aug. 26.

● Pyridalyl at 110 g a.i./ha showed excellent control of cabbage looper.



Precaution

Keep out of reach of children.
Store in a shaded, cool, and well-ventilated place.
Do not store near food and feedstuff or in living quarters.
Keep away from heat, sparks and flame.

Always adhere to the recommended dosage rate and dilution.
Use suitable equipment for measuring and mixing.
Do not measure out or mix near houses or livestock.

Do not apply during windy conditions or on rainy days.
Avoid contact with eyes or skin.
Do not inhale vapor or mist.
Change clothing whenever it becomes heavily contaminated.
Wash all clothing clean with soap after work.
All exposed skin area including hands, face and neck should be thoroughly cleansed with soap and water immediately after application.
Do not wash the equipment using water from the same source as drinking water.
Do not contaminate drinking water, river, or pond, etc.



First Aid

If eyes are splashed:

Hold the eye open and rinse slowly and gently with plenty of water. Remove contact lenses, if any. Call a physician if irritation persists.

If skin or clothing is contacted:

Take off contaminated clothing. Rinse skin immediately with plenty of water. Call a physician if irritation persists.

If swallowed:

Call a doctor immediately for treatment advice. DO NOT induce vomiting or administer liquids.



 **SUMITOMO CHEMICAL Co., Ltd.**
Crop Protection Division - International
27-1, Shinkawa 2-chome, Chuo-ku, Tokyo 104-8260, Japan