GROUP 7 FUNGICIDE

# Isofetamid 400SC Fungicide

# **COMMERCIAL**

# **SUSPENSION**

# READ THE LABEL BEFORE USING

ACTIVE INGREDIENT: Isofetamid 400 g/L

Contains 1,2-benzisothiazolin-3-one at 0.017% as a preservative

OR

Contains 2-Bromo-2-nitropropane-1,3-diol at 0.0079% and 5-Chloro-2-methyl-4-isothiazolin-3-one at 0.00076% and 2-Methyl-4-isothiazolin-3-one at 0.00025% as preservatives

REGISTRATION NO: 31555 PEST CONTROL PRODUCTS ACT

Net Contents: 500 ml to 200 L

ISK Biosciences Corporation 7470 Auburn Road, Suite A Concord, Ohio 44077 U.S.A. 1-877-706-4640

#### **PRECAUTIONS**

#### KEEP OUT OF REACH OF CHILDREN

Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during application within a closed cab. Follow manufacturer's instructions for cleaning/ maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

For applications on golf courses, do not enter or allow entry into treated turf areas until sprays have dried. For all other applications, do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Apply only when the potential for drift to areas of human habitation or areas of human activity (other than golf courses) such as parks, school grounds, and playing fields is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

Do not use in residential areas. Residential areas are defined as any use site where bystanders including children could be exposed during or after application. This includes homes, schools, parks, playgrounds, playing fields, public buildings or any other area outside of golf courses where the general public could be exposed.

Tank Mixes: When applied as a tank-mix combination, read and observe all label precautionary measures, including personal protection equipment, directions for use, application rates, and restrictions for each product used in the tank-mix. Follow the more stringent statements on the product labels for mixing, loading, applying, and for post-application entry into treated areas.

Do not apply in greenhouses.

DO NOT apply using aerial application equipment.

### **FIRST AID**

If on skin or clothing, take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

If swallowed, call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

If in eyes, 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 centre or doctor for treatment advice.

If inhaled, move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

In Case of Emergency: Call 1-888-484-7546.

#### TOXICOLOGICAL INFORMATION

Treat symptomatically.

#### ENVIRONMENTAL PRECAUTIONS

This pesticide is toxic to oysters. DO NOT apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. DO NOT contaminate waters when disposing of equipment washwaters or rinsate. Do not apply when weather conditions favor drift from the treated areas. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

Toxic to birds and small wild mammals.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

TOXIC to aquatic organisms. Observe spray buffer zones specified under DIRECTIONS FOR USE.

### **STORAGE:**

Store product in original container, in a secured, dry place separate from other pesticides, fertilizer, food, and feed.

#### DISPOSAL

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Follow provincial/territorial instruction for any required additional cleaning of the container prior to its disposal.
- 3. Make the empty container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial/territorial requirements.
- 5. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill, and for clean-up of spills.

#### **DIRECTIONS FOR USE**

ISOFETAMID is a broad-spectrum fungicide with preventative, local systemic (or translaminar) and curative properties for foliar and soil-borne diseases. ISOFETAMID must be applied in scheduled protective programs and used in rotation with products with a different mode of action.

Under conditions favorable for disease development, the highest rate specified and shortest application interval should be used. Thorough, uniform coverage is essential for disease control.

#### **MIXING**

NOTE: Slowly invert container several times to assure uniform mixture of formulation before adding this product to the spray tank.

The required amount of ISOFETAMID 400SC FUNGICIDE should be added slowly into the spray tank during filling. With concentrate sprays, pre-mix the required amount of ISOFETAMID 400SC FUNGICIDE in a clean container and add to the spray tank as it is being filled. Keep agitator running when filling spray tank and during spray operations. DO NOT allow spray mixture to stand overnight or for prolonged periods. Prepare only the amount of spray required for immediate use. Spraying equipment should be thoroughly cleaned immediately after the application.

### TANK MIXING AND COMPATIBILITY

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

ISOFETAMID 400SC FUNGICIDE is generally compatible with other fungicides, insecticides, fertilizers and micronutrient products provided sufficient free water is available for dispersion of all the tank mix products. However, the physical compatibility of this product with tank mix partners must be evaluated before use. Conduct a jar test with intended tank-mix product(s) prior to preparation of large volumes. Use the following procedure: 1) Pour the recommended proportions of the products into a suitable container of water, 2) Mix thoroughly and 3) Allow to stand 5 minutes. If the combination remains mixed or can be re-mixed readily, it is considered physically compatible. Any physical incompatibility in the jar test indicates that ISOFETAMID 400SC FUNGICIDE must not be used in the tank-mix. Since not all crop varieties have been tested with all possible tank mix combinations, the combination should also be tested for crop safety on a small portion of the crop to ensure that phytotoxicity will not occur.

In some cases, tank mixing pest control products can result in reduced pest efficacy or increased host crop injury. The user should contact ISK Biosciences Corporation at 1-877-706-4640 for information before applying any tank mix that is not specifically recommended on this label.

# **APPLICATION**

Apply ISOFETAMID 400SC FUNGICIDE in sufficient water to obtain adequate coverage of the foliage. Water volume to be used will vary with crop and amount of plant growth. Spray volume will usually range from 200 to 1000 litres per hectare for dilute sprays, typically used in orchards or for large crops. For low growing crops a spray volume of 50 to 100 litres per hectare is recommended.

#### ROTATIONAL CROP RESTRICTIONS

Crops on this label may be planted immediately after the last treatment. Do not plant other crops not registered for this product within 30 days after the last application.

#### INTEGRATED PEST MANAGEMENT

ISOFETAMID 400SC FUNGICIDE is recommended for use as part of an Integrated Pest Management (IPM) program, which may include the use of disease-resistant crop varieties, cultural practices, crop rotation, biological disease control agents, pest scouting and disease forecasting systems aimed at preventing economic pest damage. Practices known to reduce disease development should be followed. Consult your provincial cooperative extension service or local agricultural authorities for additional IPM strategies established in your area. ISOFETAMID 400SC FUNGICIDE may be used in disease forecasting programs that recommend application timing based upon environmental factors that favor disease development.

#### RESISTANCE MANAGEMENT

For resistance management, please note that ISOFETAMID 400SC FUNGICIDE contains a Group 7 fungicide. Any fungal population may contain individuals naturally resistant to ISOFETAMID 400SC FUNGICIDE and other Group 7 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

# To delay fungicide resistance:

- Where possible, rotate the use of ISOFETAMID 400SC FUNGICIDE or other Group 7 fungicides with different groups that control the same pathogens.
- Use tank mixtures with fungicides from a different group that is effective on the target pathogen when such use is permitted.
- Fungicide use should be based on an IPM program that includes scouting, historical
  information related to pesticide use and crop rotation and considers host plant
  disease resistance, impact of environmental conditions on disease development,
  disease thresholds, as well as cultural, biological and other chemical control
  practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications.
- Monitor treated fungal populations for resistance development. Notify ISK Biosciences Corporation if reduced sensitivity of the pathogen to ISOFETAMID 400SC FUNGICIDE is suspected.
- If disease continues to progress after treatment with this product, do not increase the use rate. Discontinue use of this product, and switch to another fungicide with a different target site of action, if available.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.
- For further information and to report suspected resistance, contact ISK Biosciences Corporation at 1-877-706-4640.

DIRECTIONS FOR USE						
Crop	Diseases Controlled	Use Rate	Instructions			
Grapes	Botrytis bunch rot (Botrytis cinerea)	1.46 to 1.61 L product/ha	Application Instructions: For use on all types of grapes (wine, table, raisin, and juice).			
			For bunch rot make applications at critical timings for Botrytis control on a 14 day interval. Applications are typically made at early bloom, bunch closure, veraison and pre-harvest. Apply with sufficient water to allow for penetration into the foliage to obtain complete coverage.			
			Resistance Management: Do not make more than 2 sequential applications of ISOFETAMID 400SC FUNGICIDE or other Group 7 containing fungicides before rotating to a fungicide with a different mode of action.			
			Restrictions:  Do not apply more than 3 applications/year  The Pre-Harvest Interval (PHI) for this crop is 14 days.			
Lettuce Head and Leaf	Sclerotinia drop (Sclerotinia minor, Sclerotinia sclerotiorum)	0.90 L product/ha	Application Instructions: On direct seeded lettuce make the first application after emergence, thinning or prior to onset of disease development			
			On transplanted lettuce, make the first application immediately after transplanting or prior to the onset of disease development.			
			Make a second application 14 days later if conditions continue to favor disease development.			
			Resistance Management:  Do not make more than 2 sequential applications of ISOFETAMID 400SC			

			FUNGICIDE or other Group 7 containing fungicides before rotating to a fungicide with a different mode of action.
			Restrictions:  Do not apply more than 2 applications/year  The Pre-Harvest Interval (PHI) for this crop is 14 days.
Rapeseed, Crop Subgroup 20A	rot (Sclerotinia sclerotiorum)	0.750 to 0.875 L product/ha	Application Instructions: Initiate applications at 20 to 40% flowering (BBCH 62-64) or prior to disease development. Use the higher rates for extended disease control. A second application may be made 14 days later if conditions continue to be favorable for disease development near the end of flowering (BBCH 67-69).
	Suppression of sclerotinia stem rot (Sclerotonia sclerotiorum)	0.25 – 0.75 L product/ha	Resistance Management:  Do not make more than 2 sequential applications of ISOFETAMID 400SC FUNGICIDE or other Group 7 containing fungicides before rotating to a fungicide with a different mode of action.
			Restrictions:  Do not apply more than 2 applications /year
seed; gold of pleased; oil radish; (oilseed-produc	easure; hare's ear mus poppy seed; rapeseed	stard; lesquerella; d ( <i>Brassica napus</i> ich include canola	OA: Borage; crambe; cuphea; echium; flax lunaria; meadowfoam; milkweed; mustard s, B. campestris, and Crambe abyssinica a and crambe); sesame; sweet rocket; and
Low Growing Berry, Crop Subgroup 13- 07G	Grey mold (Botrytis cinerea)	0.987 - 1.24 L product/ha	Application Instructions: Initiate applications prior to disease development and continue on a 7- to 14-day interval. When disease pressure is high use the high rate and shortest interval.  Resistance Management:
			Do not make more than 2 sequential applications of ISOFETAMID 400SC

	<b>FUNGICIDE</b> or other Group 7 containing fungicides before rotating to a fungicide with a different mode of action.
	Restrictions: Do not apply more than 5 applications /year The Pre-Harvest Interval (PHI) for this crop is 0 days.

Includes all members of the Crop Subgroup 13-07G, Bearberry; bilberry; blueberry, lowbush; cloudberry; cranberry; lingonberry; muntries; partridgeberry; strawberry; and cultivars, varieties, and/or hybrids of these.

Berry and Small Fruit Crop Group 13-07 except Subgroup 13- 07C, 13-07F, 13-07G. For instructions on grape and 13-07G, refer to tables above. DO NOT USE ON CROP SUBGROUP	Grey mold (Botrytis cinerea)	0.987 - 1.24 L product/ha (395 – 496 g a.i./ha)	Application Instructions: Initiate applications prior to disease development and continue on a 7- to 14-day interval. When disease pressure is high use the highest rate and shortest interval.  Resistance Management: Do not make more than 2 sequential applications of ISOFETAMID 400SC FUNGICIDE or other Group 7 containing fungicides before rotating to a fungicide with a different mode of action.  Restrictions: Do not apply more than 3 applications /year.
SUBGROUP 13-07C.			The Pre-Harvest Interval (PHI) for crop
			group is 7 days.

Includes all members of the Berry and Small Fruit group except Subgroups 13-07C, 13-07F and 13-07G: Aronia berry; blackberry; blueberry, highbush; Chilean guava; cranberry, highbush; currant (buffalo, black, red, native); European barberry; gooseberry; honeysuckle, edible; huckleberry; jostaberry; kiwifruit, fuzzy; raspberry, black and red; sea buckthorn; wild raspberry; and cultivars, varieties, and/or hybrids of these.

Stone Fruit, Crop Group 12-09	Suppression of Brown Rot and Blossom Blight	0.913 L product/ha	Application Instructions: Initiate applications prior to disease development and continue on a 7 to 14-
	(Monilinia fructicola)	(365 g a.i./ha)	day interval. Apply with a silicone surfactant, such as Xiameter OFX 0309 Fluid, at a rate of 0.1%.

# **Resistance Management:**

Do not make more than 2 sequential applications of ISOFETAMID 400SC FUNGICIDE or other Group 7 containing fungicides before rotating to a fungicide with a different mode of action.

#### **Restrictions:**

Do not apply more than 3 applications /year

The Pre-Harvest Interval (PHI) for this crop group is 1 day.

Do not apply in a spray volume greater than 1000 L/ha. A minimum concentration of 0.913 ml/L spray solution is required for adequate control.

Includes all members of the Stone Fruit Crop Group Family including apricot; apricot, Japanese; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these.

Do not apply in a spray volume greater	Apple	Apple Scab (Venturia inaequalis)	0.913 L product/ha (365 g a.i./ha)	Application Instructions: Initiate applications prior to disease development and continue on a 10 to 14-day interval.  Resistance Management: Do not make more than 2 sequential applications of ISOFETAMID 400SC FUNGICIDE or other Group 7 containing fungicides before rotating to a fungicide with a different mode of action.  Restrictions: Do not apply more than 6 applications /year The Pre-Harvest Interval (PHI) for this group group is 20 days
				crop group is 20 days.

Edible-podded Legume Vegetables, (Crop Subgroup 6A) except pigeon pea and pea (Pisum spp, which includes dwarf pea, edible-podded pea, snow pea, sugar snap pea)  Succulent shelled pea and bean (Crop Subgroup 6B)  Dried shelled pea and bean except soybean (Crop Subgroup 6C)	Suppression of White mold (Sclerotinia sclerotiorum)	1.25 L product/ha (500 g a.i./ha)	Application Instructions: Initiate applications prior to disease development and continue on a 7 to 14-day interval. Beans and other legumes are most susceptible to white mold infection during the bloom period.  Resistance Management: Do not make more than 2 sequential applications of ISOFETAMID 400SC FUNGICIDE or other Group 7 containing fungicides before rotating to a fungicide with a different mode of action. When applied to soybean (immature seed), for resistance management purposes, Isofetamid 400SC should be tank-mixed with Allegro 500F Agricultural Fungicide. Consult the Allegro 500F label for additional instructions and precautions.  Restrictions: Do not apply more than 2 applications /year The Pre-Harvest Interval (PHI) for edible-podded snap beans is 7 days.  The Pre-Harvest Interval (PHI) for succulent shelled peas and beans is 14 days.  The PHI for dried shelled peas and beans
			is 30 days.

Edible-podded Legume Vegetables Subgroup 6A: bean (*Phaseolus spp.*) (includes runner bean, snap bean, wax bean); bean (*Vigna spp.*) (includes asparagus bean, Chinese longbean, moth bean, yardlong bean); jackbean; soybean (immature seed); sword bean

Succulent Shelled Pea and Bean Subgroup 6B: bean (*Phaseolus spp.*) (includes lima bean, green); bean (*Vigna spp.*) (includes blackeyed pea, cowpea, southern pea); broad bean (fava bean) (*Vicia faba*); pea (*Pisum spp.*) (includes English pea, garden pea, green pea); pigeon pea (*Cajanus cajan*)

Dry Shelled Pea and Bean except Soybean Subgroup 6C: dried cultivars of bean (*Lupinus spp.*) (includes grain lupin, sweet lupin, white lupin and white sweet lupin); bean (*Phaseolus spp.*) (includes field bean, kidney bean, lima bean (dry), navy bean, pinto bean, tepary bean); bean (*Vigna spp.*) (includes adzuki bean, blackeyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean); broad bean (fava bean - dry) (*Vicia faba*); chickpea (garbanzo bean); guar; lablab bean (hyacinth bean); lentil; pea (*Pisum spp.*) (includes field pea); pigeon pea

ficia pea), pige	on peu		
Turfgrass on	Dollar Spot	12.7-15.9 or	Apply as a preventative treatment
golf courses	(Clarireedia	22.2 - 28.5	prior to or in the very early stage of
and sod	homoeocarpa)	mL	disease development.
farms <sup>1</sup>		product/100	• Apply at a 14 day interval at the 12.7
		$m^2$	$-15.9 \text{ mL}/100 \text{ m}^2 \text{ rate.}$
			• Apply at a 21 to 28 day interval at the
			$22.2 - 28.5 \text{ mL}/100 \text{ m}^2 \text{ rate.}$
			• Apply in at least 8 L of water per 100
			$m^2$ .
			• Do not apply more than 127 mL of
			product/100 m2/year.
			<ul> <li>Do not apply through any type of</li> </ul>
			irrigation system
			<ul> <li>Do not apply more than two</li> </ul>
			consecutive applications of
			ISOFETAMID 400SC FUNGICIDE
			or other Group 7 containing
			fungicides. Subsequent applications
			should be alternated with another
			registered fungicide with a different
			mode of action.

<sup>1</sup>Although ISOFETAMID 400SC FUNGICIDE has been evaluated on several turfgrass cultivars, varieties and hybrids with no indication of phytotoxicity, neither the manufacturer nor seller have determined adequate tolerance on all turfgrass under all conditions. The user should determine if ISOFETAMID 400SC FUNGICIDE can be used safely for commercial use by applying the recommended rate to a small test area under conditions to be expected and monitor for adverse effects before applying ISOFETAMID 400SC FUNGICIDE to the targeted area.

<u>Field sprayer application:</u> DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

<u>Airblast application</u>: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** direct spray above plants to be treated. Turn off outward pointing nozzles at row ends and outer rows. **DO NOT** apply when wind speed

is greater than 16 km/h at the application site as measured outside of the treatment area on the upwind side.

**DO NOT** apply using aerial application equipment.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

# **Spray Buffer Zones:**

A spray buffer zone is NOT required for uses with hand held application equipment permitted on this label.

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

		Spray Buffer Zones (metres) Required for the Protection of:					
Method of	Сгор		Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		Terrestrial Habitats
application			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer	Lettuce, Oilseed Crop Group 20A Edible-podded Legume Vegetables (Crop Subgroup 6A), Succulent shelled pea and bean (Crop Subgroup 6B), Dried shelled pea and bean except soybean (Crop Subgroup 6C) Berry and Small Fruit (Crop 13-07 except Subgroups 13-07C, 13-07F and 13-07G)		1	0	0	0	0
	Low-growing berries (Crop Group 13-07G)		1	1	1	0	0
	Turf		2	1	1	0	1
Airblast	Grapes, Pome Fruit (Crop Group 11-09)	Early growth stage	15	1	1	0	0
		Late growth stage	5	1	1	0	0
	Low-growing berries (Crop Group 13-07G)	Early growth stage	15	1	1	0	0

	Late growth stage	10	1	1	0	0
Berry and Small (Crop 13-07 exc		10	0	0	0	0
Subgroups 13-0° 13-07F and 13-0		5	0	0	0	0
Stone Fruit (Cro	Early growth stage	10	0	0	0	0
Group 12-09)	Late growth stage	4	0	0	0	0

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

The spray buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Spray Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

# **NOTICE TO USER**

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.