# MKH 6561 70WG Herbicide



GROUP 2 HERBICIDE

FOR POSTEMERGENCE WEED CONTROL IN WINTER WHEAT

# FOR USE ONLY IN MANITOBA, SASKATCHEWAN, ALBERTA AND PEACE RIVER, OKANAGAN AND CRESTON FLATS REGIONS OF BRITISH COLUMBIA

### WATER DISPERSIBLE GRANULAR

### **AGRICULTURAL**

GUARANTEE: propoxycarbazone-sodium ....... 70%

Warning: contains the allergen milk

REGISTRATION NO. 32249 PEST CONTROL PRODUCTS ACT



## READ THE LABEL AND LEAFLET BEFORE USING KEEP OUT OF REACH OF CHILDREN

NET CONTENTS: 0.25 to 20 Kg

Product Information: 1-888-283-6847 www.bayercropscience.ca

Bayer CropScience Inc. Suite 100, 3131 114th Avenue S.E. Calgary, Alberta T2Z 3X2

In case of spills, poisoning or fire, telephone emergency response number 1-800-334-7577 (24 hours a day).

### **PRECAUTIONS**: KEEP OUT OF REACH OF CHILDREN.

Harmful if swallowed.

Avoid contact with skin, eyes or clothing.

Wash thoroughly after using and before eating, drinking, smoking or using the toilet. Remove contaminated clothing immediately, then wash thoroughly and put on clean clothing.

Remove Personal Protective Equipment (PPE) immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them.

Follow manufacturer's instructions for cleaning/maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Apply only when the potential for drift to areas of human habitation or areas of human activity (such as houses, cottages and recreational areas) is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

Protective Clothing and Equipment: Wear long-sleeved shirt and long pants, shoes and socks during all activities. In addition, wear chemical resistant gloves, rubber boots and protective eyewear during mixing/loading, clean-up and repair.

Re-entry Interval: Do not enter or allow worker entry into treated areas until 12 hours after application.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at: www.croplife.ca.

### **FIRST AID:**

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

- If swallowed Call a poison control centre or doctor immediately for treatment
  - 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 on skin or clothing

- Remove contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- 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 treatment advice.

**TOXICOLOGICAL INFORMATION:** No specific antidote is available. Treat the patient symptomatically.

### **ENVIRONMENTAL HAZARDS:**

TOXIC to aquatic plants and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

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.

### **STORAGE**

Keep in original container during storage.

Store in a cool, dry place.

Store the tightly closed container away from feeds, seeds, fertilizers, plants and foodstuffs.

Do not use or store in or around the home.

### **DISPOSAL:** Recyclable Container

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

**Disposal of Unused, Unwanted Product:** For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for cleanup of spills.

**NOTICE TO USER**: This pest control product is only to be used 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. The user assumes the risk to persons or property that arises from any such use of this product.

## MKH 6561 70WG

### Herbicide



GROUP 2 HERBICIDE

### FOR POSTEMERGENCE WEED CONTROL IN WINTER WHEAT

# FOR USE ONLY IN MANITOBA, SASKATCHEWAN, ALBERTA AND PEACE RIVER, OKANAGAN AND CRESTON FLATS REGIONS OF BRITISH COLUMBIA

### WATER DISPERSIBLE GRANULAR

### **AGRICULTURAL**

GUARANTEE: propoxycarbazone-sodium ....... 70%

Warning: contains the allergen milk

REGISTRATION NO. 32249 PEST CONTROL PRODUCTS ACT



# READ THE LABEL AND LEAFLET BEFORE USING KEEP OUT OF REACH OF CHILDREN

NET CONTENTS: 0.25 to 20 Kg

Product Information: 1-888-283-6847 www.bayercropscience.ca

Bayer CropScience Inc.
Suite 100, 3131 114th Avenue S.E.
Calgary, Alberta T2Z 3X2

In case of spills, poisoning or fire, telephone emergency response number 1-800-334-7577 (24 hours a day).

Table of Contents: Section Number

GENERAL INFORMATION	NOTICE	1
INFORMATION	THE PRODUCT	2
SAFETY AND HANDLING	PRECAUTIONS, PROTECTIVE CLOTHING AND EQUIPMENT	3
	FIRST AID AND TOXICOLOGICAL INFORMATION	4
	ENVIRONMENTAL HAZARDS	5
	STORAGE	6
	DISPOSAL	7
DIRECTIONS FOR USE	CROPS AND WEEDS	8
	CROPS AND APPLICATION TIMINGWEEDS CONTROLLED AND APPLICATION RATERAINFASTNESS	8.2
	APPLICATION INSTRUCTIONS AND USE LIMITATIONS	9.1 9.2 9.3
	PRE-HARVEST INTERVAL, PRE-GRAZING/FEEDING INTERVAL	10
	MIXING INSTRUCTIONS	11
	SPRAYER CLEAN UP	12
	RESISTANCE MANAGEMENT RECOMMENDATIONS	13

### **GENERAL INFORMATION**

### **SECTION 1: NOTICE**

NOTICE TO USER: This pest control product is only to be used 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. The user assumes the risk to persons or property that arises from any such use of this product.

### SECTION 2: THE PRODUCT

MKH 6561 70WG is a post-emergent herbicide that provides control of important grass and broadleaf weeds in winter wheat.

### SAFETY AND HANDLING

## SECTION 3: PRECAUTIONS, PROTECTIVE CLOTHING AND EQUIPMENT

PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN.

Harmful if swallowed.

Avoid contact with skin, eyes or clothing.

Wash thoroughly after using and before eating, drinking, smoking or using the toilet. Remove contaminated clothing immediately, then wash thoroughly and put on clean clothing.

Remove Personal Protective Equipment (PPE) immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them.

Follow manufacturer's instructions for cleaning/maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Apply only when the potential for drift to areas of human habitation or areas of human activity (such as houses, cottages and recreational areas) is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

**Protective Clothing and Equipment:** Wear long-sleeved shirt and long pants, shoes and socks during all activities. In addition, wear chemical resistant gloves, rubber boots and protective eyewear during mixing/loading, clean-up and repair.

Re-entry Interval: Do not enter or allow worker entry into treated areas until 12 hours after application.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at : www.croplife.ca.

### **SECTION 4:** FIRST AID AND TOXICOLOGICAL INFORMATION

### FIRST AID:

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

- 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 on skin or clothing

- Remove contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- 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 treatment advice.

**TOXICOLOGICAL INFORMATION:** No specific antidote is available. Treat the patient symptomatically.

### SECTION 5: ENVIRONMENTAL HAZARDS

TOXIC to aquatic plants and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

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.

### **SECTION 6: STORAGE**

- Keep in original container during storage.
- Store in a cool, dry place.
- Store the tightly closed container away from feeds, seeds, fertilizers, plants and foodstuffs.
- Do not use or store in or around the home.

### **SECTION 7: DISPOSAL**

### **Recyclable Container**

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

**Disposal of Unused, Unwanted Product:** For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for cleanup of spills.

### **DIRECTIONS FOR USE**

### **SECTION 8: CROPS AND WEEDS**

### 8.1 CROPS AND APPLICATION TIMING

MKH 6561 70WG Herbicide may be applied to the following crop when at the indicated growth stages:

CROP	GROWTH STAGE	REMARKS
Winter Wheat	Crop may be treated when at the 1-leaf stage of growth up to just prior to jointing.	Do not apply to a crop that is stressed by severe weather conditions, frost, low fertility, drought, water-saturated soil, disease or insect damage, as crop injury may result.

### 8.2 WEEDS CONTROLLED AND APPLICATION RATE

Treatment with MKH 6561 70WG Herbicide at 42 or 63 g/ha (in the fall *or* spring) plus a nonionic surfactant at 0.25% v/v, and applied according to label recommendations, will provide control the following weed species:

WEED SPECIES	FALL APPLICATION RATE		SPRING APPLICATION RATE		RECOMMENDED WEED STAGE AT APPLICATION	
	42 g/ha	63 g/ha	42 g/ha	63 g/ha	APPLICATION	
Downy brome	S	С	S	S	2-leaf stage up to and including 2 tillers	
Japanese brome	С	С	S	С	2-leaf stage up to and including 6 tillers	
Black mustard	С	С	С	С	1- to 6-leaf stage	
Blue mustard	С	С	S	С	1- to 6-leaf stage	
Burr buttercup	С	С	С	С	1- to 6-leaf stage	
Bushy wallflower	S	С	S	С	1- to 6-leaf stage	
Flixweed	С	С	С	С	up to 5 cm in diameter	
Henbit	S	S	-	S	1- to 6-leaf stage	
Mouseear chickweed	S	С	-	-	1- to 6-leaf stage	
Redroot pigweed	-	S	С	С	1- to 8-leaf stage	
Shepherd's-purse	С	С	С	С	up to 5 cm in diameter	
Small seeded falseflax	С	С	С	С	up to 5 cm in diameter	
Stinkweed	С	С	С	С	up to 5 cm in diameter	
Tansy mustard	С	С	С	С	up to 5 cm in diameter	
Tumble mustard	С	С	С	С	up to 5 cm in diameter	
Volunteer canola	С	С	С	С	1- to 6-leaf stage	
Wild buckwheat	-	-	-	S	1- to 6-leaf stage	
Wild mustard	С	С	С	С	1- to 6-leaf stage	
Wormseed mustard	С	С	С	С	1- to 6-leaf stage	

S = suppression, C = Control

- MKH 6561 70WG Herbicide is a water dispersible granule that does not include an adjuvant. A non-ionic surfactant must be tank mixed with MKH 6561 70WG Herbicide (see Section 11 "Mixing Instructions"). Do not use an organosiliconebased surfactant.
- MKH 6561 70WG Herbicide is absorbed by foliage and roots of weeds and offers contact and residual control.
- Best weed control can be expected when applications are made after the crop has fully emerged and before grass weeds tiller.
- Environmental conditions which support vigorous growth of crop and weeds result in greatest herbicidal activity.
- Following application, symptoms of herbicidal activity may develop within several days. Speed of action depends on environmental conditions and increases with increasing temperature and moisture.

- Visible signs of activity include termination of plant development, yellowing and/or reddening of weeds, and finally plant death.
- Weeds growing under adverse environmental conditions such as excess soil
  moisture, drought or extreme cold weather drought will be less susceptible to
  MKH 6561 70WG Herbicide and may result in reduced levels of weed control.
  This may result in weed stunting rather than weed death, but weed population will
  be greatly reduced and should permit normal crop development.

### 8.3 RAINFASTNESS

Rainfall within 4 hours of application may reduce effectiveness.

## SECTION 9: APPLICATION INSTRUCTIONS and USE LIMITATIONS

### 9.1 GENERAL REMINDERS FOR SUCCESSFUL OPERATION

- Apply only once per crop cycle (in the fall or spring) by ground equipment
- Apply to emerged, young, actively growing weeds.
- Treat heavy weed infestations before they become competitive with the crop.
- Abnormal environmental conditions (excess soil moisture or drought, extreme cold weather) can influence crop tolerance and may cause temporary damage to the crop.
- If crop is under stress due to abnormal environmental conditions, delay application until stress passes and both crop and weeds have resumed active growth.
- Crop response may occur when frost occurs shortly after application to actively growing wheat.
- Follow directions under Section 8 for the correct rate and timing of application.
- Avoid overlapping; shut off spray boom while starting, turning, slowing or stopping to prevent crop injury from over-application.
- Avoid contact with desirable plants or crops either from direct application or from spray drift as severe damage may occur.
- 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.
- DO NOT treat wheat underseeded to legumes.
- DO NOT apply by air.

### 9.2 GROUND APPLICATION

### **GROUND APPLICATION**

- Apply in a minimum water volume of 46.8 L/ha, using a spray pressure of 207-345 kPa, to ensure proper weed coverage.
- For weed control in dense canopies, use a minimum water volume of 140 L/ha.

- Use screens that are 50-mesh or larger.
- Flat fan nozzles of 80° or 110° are recommended for optimum coverage.
- Do not use floodjet or controlled droplet application equipment or Sprafoil<sup>®</sup> equipment.
- Nozzles may be oriented 45° forward to enhance crop penetration and to give better weed coverage.
- Uniform, thorough coverage is important to obtain consistent weed control. The higher water volumes should be used under dense crop and weed canopies to ensure thorough coverage of the target weeds.
- Field sprayer application: 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) coarse classification. Boom height must be 60 cm or less above the crop or ground.
- **DO NOT** apply by air.

### 9.3 BUFFER ZONES

Use of the following spray methods or equipment DO NOT require a buffer zone: hand-held or backpack sprayer and spot treatment.

The 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) and sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands).

		Buffer Zone (metres) Required for the Protection of:			
Method of Application Cro	Cron	Freshwater Habitats of Depths			Torroctrial
	Стор	Less than 1 m		Greater than 1 m	Terrestrial Habitat
Field Sprayer	Winter Wheat	1		0	1

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) 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 buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pest Management Regulatory Agency web site.

### 9.4 ROTATIONAL CROPS

Breakdown of MKH 6561 70WG Herbicide in the soil is due mainly to microbial activity. It can be affected by soil temperature and moisture. Conditions that

accelerate the breakdown of MKH 6561 70WG Herbicide include adequate soil moisture and adequate soil temperatures to support microbial activity. Likewise, MKH 6561 70WG Herbicide breakdown can be slowed under dry, cold conditions. When considering crop rotations, soil moisture and soil temperature conditions since application must be monitored.

Only the following crops have been field tested to indicate they may be safely planted at the prescribed interval, after an application of MKH 6561 70WG Herbicide. To avoid the possibility of injury to subsequent crops after an application of the recommended rate of MKH 6561 70WG Herbicide, follow the crops / replanting interval which appear on this label. A field bioassay must be conducted the year prior to growing any other crop of interest to confirm crop safety.

Crop	Rotation Interval
Wheat, spring	10 months
Wheat, winter	10 months

## SECTION 10: PRE-HARVEST- AND PRE-GRAZING/FEEDING INTERVALS

 DO NOT harvest wheat for grain or straw within 71 days of application. Wheat forage may be grazed immediately after MKH 6561 70WG Herbicide application.

### **SECTION 11: MIXING INSTRUCTIONS**

MKH 6561 70WG Herbicide must be applied with clean and properly calibrated spray equipment. Prior to adding MKH 6561 70WG Herbicide to the spray tank, ensure that the spray tank, filters and nozzles have been thoroughly cleaned (see Section 12 "Sprayer Cleanup").

- 1. Fill the spray tank ¼ to ½ full with clean water and begin agitation.
- 2. Add the appropriate amount of MKH 6561 70WG Herbicide directly to the tank.
- 3. Continue agitation until MKH 6561 70WG Herbicide is fully dispersed.
- 4. Add the non-ionic surfactant.
- 5. Fill the spray tank with the balance of water required.
- 6. Continue agitation during mixing and herbicide application to ensure uniform spray coverage. If the mixture is not continuously agitated, settling may occur.

MKH 6561 70WG Herbicide may settle if left standing without agitation. If the spray solution is allowed to stand for one hour or more, re-agitate the spray solution for a minimum of 10 minutes before application.

### SECTION 12: SPRAYER CLEANUP

Before and after using MKH 6561 70WG Herbicide, always complete a thorough cleaning of the spray tank, lines and filters. The following procedures are recommended:

- 1. Drain the tank completely, and then wash out tank, boom and hoses with clean water. Drain again.
- 2. Half fill the tank with clean water and add ammonia (i.e., 3% domestic ammonia solution) at a dilution rate of 1% (i.e., 1 litre of domestic ammonia for every 100 litres of rinsate). Complete filling of the tank with water. Agitate/recirculate and flush through boom and hoses. Leave agitation on for 10 minutes. Drain tank completely.
- 3. Repeat step 2.
- 4. Remove nozzles and screens and soak them in a 1% ammonia solution. Inspect nozzles and screens and remove visible residues.
- 5. Flush tank, boom, and hoses with clean water.
- 6. Inspect tank for visible residues. If present, repeat step 2.
- 7. Dispose of rinsate in accordance with provincial regulations.

### **SECTION 13: RESISTANCE MANAGEMENT RECOMMENDATIONS**

For resistance management, MKH 6561 70WG Herbicide is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to MKH 6561 70WG Herbicide and other Group 2 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. 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 herbicide resistance:

- 1. Where possible, rotate the use of MKH 6561 70WG Herbicide or other Group 2 herbicides with different herbicide groups that control the same weeds in a field.
- 2. Use tank mixtures with herbicides from a different group when such use is permitted.
- Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical), cultural, biological and other chemical control practices.
- 4. Monitor treated weed populations for resistance development.
- 5. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- 6. Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- 7. For further information or to report suspected resistance contact Bayer CropScience Inc. via internet at <a href="https://www.bayercropscience.ca">www.bayercropscience.ca</a> or telephone at 1-888-283-6847.