13-AUG-2010

Datapak

GROUP	4	HERBICIDE

SWORD®
COMMERCIAL HERBICIDE

COMMERCIAL SOLUTION

CAUTION POISON

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

PROTECT FROM FREEZING

GUARANTEE:	MCPA	275 g a. e. /L
	Mecoprop-P	62.5 g a. e. /L
	Dicamba	62.5 g a. e. /L
	(all present as dimethylamine salts)	

REGISTRATION NO. 27892
PEST CONTROL PRODUCTS ACT

IN CASE OF EMERGENCY DUE TO A MAJOR SPILL, FIRE OR POISONING INVOLVING THIS PRODUCT CALL DAY OR NIGHT, 1-800-561-8273

LOVELAND PRODUCTS CANADA INC.
789 Donnybrook Drive
Dorchester, Ontario
N0L 1G5
1-800-328-4678

NET CONTENTS: 1 – 22 000 L

12/11

GENERAL INFORMATION:
For systemic control of many broadleaf weeds in: Wheat (spring, durum and winter), Barley, Oats, Stubble Fields, Summer fallow, and Canary Seed (*Phalaris canariensis*), and seedling and established grasses grown for forage.

Note: Do not underseed to legumes.

RESISTANCE MANAGEMENT RECOMMENDATIONS:
For resistance management SWORD COMMERCIAL HERBICIDE is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to SWORD COMMERCIAL HERBICIDE and other Group 4 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:

- Where possible, rotate the use of SWORD COMMERCIAL HERBICIDE or other Group 4 herbicides with different herbicide groups that control the same weeds in a field.
- 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, cultural, biological and other chemical control practices.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- 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.
- For further information or to report suspected resistance, contact Technical Service at 1-800-328-4678 or at www.uap.ca.

DIRECTIONS FOR USE:

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 (according to the appropriate buffer zone table). Boom height must be 60 cm or less above the crop or ground.

AERIAL APPLICATION: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply when wind speed is greater than 16 km/h at flying height at the site of application. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) coarse classification (according to the appropriate buffer zone table). To reduce drift caused by

turbulent wingtip vortices, the nozzle distribution along the spray boom length MUST NOT exceed 65% of the wingspan or rotorspan.

DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands), estuarine or marine habitats.

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

SURFACE RUNOFF: To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to, heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted, fine-textured, or low in organic matter such as clay).

Avoid applying this product when heavy rain is forecast.

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

LEACHING: The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g. sand, loamy sand and sandy loam soils) and/or the depth to the water table is shallow.

WEEDS CONTROLLED:
Best results are obtained when weeds are in the 2-3 leaf stage and actively growing. Less than satisfactory control may result if weeds are not actively growing.
Buckwheat (wild, tartary, volunteer cultivated), Cleavers[1], Common Ragweed, Corn Spurry, Cow Cockle, Flixweed, Green Smartweed, Hempnettle[2], Knotweed, Kochia, Lady's-thumb, Lamb's-quarters, Mustards (wild, ball, tall, wormseed, yellow), Night Flowering Catchfly, Pigweeds (prostrate, redroot), Russian Thistle[3], Shepherd's Purse, Annual Sow Thistle, Stinkweed, Volunteer Rapeseed, Volunteer Sunflower. Also Chickweed by tank mixes.

Top Growth Control Only: Canada thistle, Field Bindweed, Hedge Bindweed, Perennial Sow Thistle
Note: 1 Cleavers: Spray in 1-2 whorl stage
2 Hempnettle: Spray before second pair of true leaves
3 Russian thistle: Spray when less than 5 cm in height

Timing of application:

Crop	Crop Stage
Wheat (spring, durum) Oats, Canary Seed (*Phalaris canariensis*)	2 to 5-leaf
Winter Wheat	For winter wheat, apply in the spring before the crop is more than 30 cm high (top leaf extended). Winter annual weeds should be sprayed as soon as new growth starts.
Barley	2 to 4-leaf
Note: Application made later than the recommended timing may result in flattening of the crop and shortening of the straw (particularly under stress conditions).	

APPLICATION INFORMATION:
Rate 1 to 1.5 litres per hectare.
Use 50-200 L/ha (depending on crop) of water by ground and 30 L/ha by air.
Use the 1.5 L/ha rate:
a) When weeds are not actively growing due to extended periods of hot and dry or cold and wet weather prior to or following application.
b) When weeds are beyond the 3-leaf stage
c) For heavy weed infestations.
d) For top growth control of Canada Thistle, Perennial Sow Thistle, Field Bindweed, Hedge Bindweed and for control of Cleavers.
e) For control of overwintering Flixweed, Shepherd's-Purse and stinkweed. Avoid overlapping. Shut off spray boom while starting, turning, slowing and stopping, otherwise crop injury may result.

USE APPLICATIONS FOR AERIAL APPLICATIONS:
Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label. Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment. Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

USE PRECAUTIONS:
Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the National Aerial Pesticide Application Manual, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides. Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed. Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and

direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

OPERATOR PRECAUTIONS:
Do not allow the pilot to load chemicals or to mix chemicals to be loaded onto the aircraft. Aircraft must be closed cab. Loading of premixed chemicals with a closed system is permitted. It is desirable that the pilot have communication capabilities at each treatment site at the time of application. No human flaggers permitted.
The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls, socks, shoes and goggles or face shield during mixing/loading, cleanup and repair.
Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.
All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

PRODUCT-SPECIFIC PRECAUTIONS:
RESTRICTED-ENTRY INTERVALS RELATING TO OCCUPATIONAL EXPOSURE:
• Re-entry is not permitted until 12 hours after application for all agricultural scenarios.
• For grasses grown for seed, summer fallow and stubble land, a maximum of 2 applications is permitted per season with a minimum retreatment interval of 21 days.
• For established grasses, grass seedlings, a maximum of 2 applications is permitted per season, with a minimum retreatment interval of 90 days.

HANDLING THE CONCENTRATE (MIXING AND LOADING):
Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes, and protective eye wear (face shield or safety glasses). Rinse gloves before removal. Coveralls or a chemical-resistant apron should also be worn when open pouring from containers greater than 5 L.

HANDLING THE DILUTE SPRAY SOLUTION (DURING APPLICATION OR REPAIRING OR CLEANING EQUIPMENT):
Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Rinse gloves before removal. Aerial applicators and applicators using a closed cab are not required to wear chemical-resistant gloves.

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-800-265-4624 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:
VOLUME: Apply the recommended rate in a minimum spray volume of 30 litres per hectare.
BUFFER ZONE: Observe the provincial buffer zones between treatment areas and any aquatic systems or significant wildlife habitat.

Do not use in residential areas, which are defined as sites where bystanders may be present during or after spraying, including homes, schools, parks, playgrounds, playing fields and public buildings.

BUFFER ZONE:
Use of the following spray methods or equipment DO NOT require a buffer zone: handheld or backpack sprayer, 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), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

Method of Application	**Crop**		**Buffer Zones (metres) Required for the Protection of:**				
			Freshwater Habitat of Depths:		**Estuarine/Marine Habitats of Depths:**		**Terrestrial Habitat**
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer*	Barley, oats, wheat, forage grass (seedlings), canary seed		1	1	1	1	5
	stubble, summer fallow, forage grass (established)		1	1	1	1	5
Aerial	Terrestrial Food and Feed Crops						
	Barley, oats, wheat	Fixed wing	1	0	1	0	60
		Rotary wing	1	0	1	0	50
	Grasses	Fixed wing	1	0	1	1	75
		Rotary wing	1	0	1	1	60
	stubble, summer fallow	Fixed wing	5	1	1	1	100
		Rotary wing	4	1	1	1	80

* For field sprayer application, buffer zones can be reduced with the use of drift-reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labeled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labeled buffer zone can be reduced by 30%.

MAXIMUM APPLICATIONS:

Site	Maximum Rate for a Single Application * (g a.e. MCPA /ha)	Cumulative Maximum Rate per Season (g a.e. MCPA /ha)	Maximum Number of Applications per Year
Grasses, established (hay and forage)	1120	2240	2
Barley, Oats, wheat	875	875	1

*: Do not exceed the application rates listed in the Application Information section of this product's label.

CHICKWEED CONTROL:

To control Chickweed and other hard-to-kill broadleaf weeds in wheat and barley, use one of the following tank mixes:

	Tank Mix Partner	**Rate**
SWORD COMMERCIAL HERBICIDE 1-1.5 L/ha +	SENCOR® 500 F**	275-425 mL/ha
	LOROX® L	425 mL/ha
	AFOLAN® F	470 mL/ha
Consult the tank mix partner label for detailed instructions and precautions. ** For Western Canada only: Application of this tank mix at later crop stages may result in injury if crop is under stress.		

CANADA THISTLE:

Program for gradual eradication of Canada Thistle:

Year 1:	Summer fallow	Apply 2 L/ha when Canada Thistle is in early bud stage. Do not cultivate for a minimum of 4 weeks after application.
Or: Post Harvest (Stubble)		Apply 2 L/ha to Canada Thistle re-growth. Treatment at the 15-20 cm stage of actively growing Canada Thistle will provide the best results. Do not apply within 2 weeks of killing frost.
Year 2:	In Crop	Apply 1.5 litres per hectare when Canada Thistle is young and actively growing.

Note: Repeating this program will gradually eliminate Canada Thistle.

BROADLEAF WEEDS, WILD OATS, GREEN AND YELLOW FOXTAIL CONTROL IN SPRING WHEAT ONLY IN THE PRAIRIE PROVINCES AND THE PEACE REGION OF BRITISH COLUMBIA

To control broadleaf weeds, wild oats and yellow foxtail in spring wheat only in the following tank mix:

	Broadleaf Weeds and Wild Oats	Green Foxtail Wild Oats Yellow Foxtail And Broadleaf Weeds
SWORD COMMERCIAL HERBICIDE 1-1.5 L/ha +	230 mL/ha of HORIZON® 240 EC + 0.8% Volume/volume of SCORE® (800 ml of SCORE® in 100 L of water per hectare)	290 mL/ha of HORIZON® 240 EC + 1% volume/volume of SCORE® (1L of SCORE® in 100 L of water per hectare)

NOTES:

1. Do not use SWORD COMMERCIAL HERBICIDE / HORIZON tank mix on barley or on oats.
2. Consult tank mix partner label for detailed instructions and precautions.
3. Apply when spring wheat is in the 2-5 leaf stage.
4. DO NOT APPLY THIS TANK MIX BY AIR.
5. Use a minimum of 100 L of water per hectare
6. Observe a minimum interval to harvest of 60 days after treatment.
7. Observe a minimum of 7 days before grazing livestock on crops treated with the tank mix.
8. Apply when broadleaf weeds are in the 2-3 leaf stage, when wild oats are in the 1-6 leaf stage and when foxtails are in the 1-5 leaf stage.
9. Do not contaminate streams, rivers, lakes, ponds, wetlands, sloughs, irrigation waters, vegetated ditch banks and other water used by livestock or for domestic purposes. Do not apply within 15 metres of a wetland area or any of the aforementioned bodies of water.

SWORD COMMERCIAL HERBICIDE WITH EVEREST TANKMIX

CROP	WEEDS	RATE	REMARKS
Spring Wheat Including: Hard red spring, Canada Prairie spring, soft white spring and extra strong (utility) wheat	Wild Oats* Green Foxtail (wild Millet) Broadleaf Weeds listed on the SWORD COMMERCIAL HERBICIDE label	EVEREST SOLUPAK 70 DF, 43 g/ha + SWORD COMMERCIAL HERBICIDE 1-1.5 L/ha + AGRAL 90 2.5 L/1000 L	Follow all directions and precautions on the tank-mix partner labels.

*Reduction in wild oat control may be observed with this tank mixture

SEEDLING GRASSES GROWN FOR FORAGE (In the year of establishment), include Creeping Red Fescue, Crested Wheatgrass, Intermediate Wheatgrass, Meadow Foxtail, Orchard grass, Smooth Bromegrass, Timothy.

ESTABLISHED FORAGE GRASSES, includes Timothy, Orchard grass, Meadow Fescue, Kentucky Bluegrass, Meadow Foxtail, Creeping Red Fescue, Meadow Bromegrass, Smooth Bromegrass, Tall Fescue and Intermediate, Crested, Streambank, Slender, Pubescent, Tall and Western Wheatgrass.

STATEMENTS REDUCING DIETARY EXPOSURE:
When used on barley, oats, wheat, stubble land:
• Do not permit lactating dairy animals to graze fields within 7 days after application.
• Do not harvest forage or cut hay within 30 days after application.
• Withdraw meat animals from treated fields at least 3 days before slaughter.

NOTE TO BUYER/USER:
The DIRECTIONS FOR USE for this product for weed control in Seedling Grasses grown for Forage and in Established Forage Grasses were developed by persons other than Loveland Products Canada Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Loveland Products Canada Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on Seedling Grasses grown for forage or on Established Forage Grasses. Accordingly, the Buyer and User assume all liability arising, and agree to hold Loveland Products Canada Inc. harmless, from any claims based on efficacy and/or phytotoxicity in connection with use on Seedling Grasses grown for Forage and on Established Forage Grasses.

DIRECTIONS FOR USE IN SEEDLING GRASSES GROWN FOR FORAGE:
Rate: 1 - 1.5 L/ha.
Make one application, in the year of establishment, when the seedling grasses are at the 2-4 leaf stage of growth.
Apply in 100 L of water per hectare. Do not graze the crop or use for feed within 7 days of application.
Do not underseed to legumes.

DIRECTIONS FOR USE IN ESTABLISHED FORAGE GRASSES:
Rate: 1 - 1.5 L/ha.
Make one application per year, by ground, up to the shot blade stage of growth of the Forage Grasses. Apply in 100 L of water per hectare.
Do not graze the crop or use for feed within 7 days of application.
Do not underseed the legumes. Applications made later than the recommended timing may result in crop damage (particularly under stress conditions).

MIXING AND SPRAYING INSTRUCTIONS:

Spray Pressure: 200-300 kPa

Spray volume: minimum of 100 litres of water per hectare.

Use 50 mesh screen and filters

1. Fill the sprayer 1/2 full with water. Start gentle agitation.
2. Add tank mix partner, if applicable, and agitate thoroughly.
3. Fill tank 3/4 full with water and add SWORD COMMERCIAL HERBICIDE.
4. Complete filling of sprayer and maintain gentle agitation while mixing and spraying.
5. Do not allow contents to stand without agitation.

PRECAUTIONS:
KEEP OUT OF REACH OF CHILDREN.
Do not reuse containers. Do not allow spray drift to contact plants other than those being sprayed. Do not contaminate streams, lakes, ponds, and irrigation water, water used for livestock, or domestic purpose. Sprayers which have contained SWORD COMMERCIAL HERBICIDE should not be used to apply other pesticides to MCPA or 2,4-D susceptible crops.
If 2, 4-D or MCPA susceptible plants are growing within a distance of 400 metres from the area being sprayed, spray only when there is a light breeze away from the susceptible plants. Spray drifting can be reduced by using high volume sprays under low pressure, course sprays and drop nozzles. Susceptible crops include grape, tomato, tobacco, sugar beet, sunflower, beans, soybean, turnip, cauliflower and cabbage as well as many other field, vegetable, ornamental and fruit crops. If SWORD COMMERCIAL HERBICIDE is applied when crop is under stress, shortening of straw may occur, but yield will not be affected. Protect from freezing.

CAUTION: Do not graze or harvest for livestock feed within seven (7) days of 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 website at www.croplife.ca.

ENVIRONMENTAL HAZARDS:
Toxic to aquatic organisms, birds, small wild mammals and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

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 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 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 INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth, if possible. Call a poison control centre or doctor for treatment advice.
Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION:
Irritation Skin: Slight irritation. Irritation Eye: Severe irritation. Chronic Exposure: Prolonged or repeated contact may cause dermatitis.
Sensitization: A sensitization reaction for dicamba indicates that some individuals may develop an allergy to this product.

Dicamba may cause severe irritation to the eyes, and irritation to the skin and mucous membranes. Symptoms of overexposure to dicamba may include dizziness, muscle weakness, loss of appetite, weight loss, vomiting, decreased heart rate, shortness of breath, excitement, tenseness, depression, incontinence, cyanosis, muscle spasms, exhaustion and loss of voice.

High concentrations of MCPA may cause severe irritation to the eyes. Symptoms of overexposure to MCPA could include slurred speech, twitching, jerking and spasms, drooling, low blood pressure and unconsciousness.

NOTE TO PHYSICIAN: Corrosive in eyes. SWORD COMMERCIAL HERBICIDE contains phenoxy and benzoic derivative herbicides. There is no specific antidote. If a large amount has been swallowed and emesis has been inadequate, lavage stomach. Alkaline diuresis may be useful. Avoid epinephrine because of the danger of ventricular fibrillation. Treat symptomatically.

DECONTAMINATION AND DISPOSAL:

REFILLABLE CONTAINER:
For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse container for any other purpose.

NON-RECYCLABLE, NON-RETURNABLE, NON-REFILLABLE CONTAINER:
1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instructions 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 requirements.

UNUSED, UNWANTED PRODUCT:
For information on the 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 clean-up of spills.

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

All product names are registered trademarks of their respective companies.