

1 of 6  
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464-563

# Specimen Label

NOT FINISHED  
In Accordance with IR Notice 82-2.  
Based on the Labeling Dated 12/1/88

# Curtail\*

## Herbicide

# Curtail\*

For Selective Control of Broadleaf Weeds in Wheat and Barley Not Underseeded with a Legume, Fallow Cropland and Conservation Reserve Program (CRP) Acres

**Active Ingredient(s):**

Clopyralid (3,6-Dichloro-2-pyridinecarboxylic acid) as alkanolamine salts (of the ethanol and isopropanol series) .....	6.2%
2,4-Dichlorophenoxyacetic Acid as alkanolamine salts (of the ethanol and isopropanol series) .....	31.5%
Inert Ingredient(s): .....	62.3%

**Acid Equivalents:**

3,6-Dichloro-2-pyridinecarboxylic acid 3.9% - 0.38 lb/gal  
2,4-Dichlorophenoxyacetic acid 20.8% - 2.0 lb/gal  
E.P.A. Registration No. 464-563  
E.P.A. Est. 464-MI-1

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

**PELIGRO:**

**PRECAUCION AL USUARIO:**

Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals**

**CAUSES EYE DAMAGE AND SKIN IRRITATION • HARMFUL IF SWALLOWED**

**Do Not Get In Eyes, On Skin Or On Clothing**  
• Wear Goggles Or Face Shield When Handling • Wash Thoroughly With Soap And Water After Handling • Remove Contaminated Clothing And Wash Before Reuse

**STATEMENTS OF PRACTICAL TREATMENT:** If in eyes, flush with plenty of water for at least 15 minutes. Get medical attention. If on skin, wash with plenty of soap and water. Get medical attention if irritation persists. If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Call a physician. Do not induce vomiting or give anything by mouth to an unconscious person.

**Environmental Hazards**

Keep out of lakes, streams or ponds. Do not contaminate water when disposing of equipment washwaters. Do not contaminate water used for irrigation or domestic purposes. Do not apply directly to any body of water or wetlands. See additional precautionary statements elsewhere on this label.

**NOTICE**

Read the entire label. Use only according to label directions.

Before buying or using this product, read "WARRANTY LIMITATIONS AND DISCLAIMER" elsewhere on this label. If terms are not acceptable, return unopened package at once to seller for full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under "WARRANTY LIMITATIONS AND DISCLAIMER."

**IN CASE OF AN EMERGENCY**

endangering life or property involving this product, call collect 517-636-4400  
**AGRICULTURAL CHEMICAL**  
Do Not Ship or Store with Food, Feeds, Drugs, or Clothing

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product through any type of irrigation system.

CURTAIL Herbicide is recommended for selective, postemergence control of the following broadleaf weeds in wheat and barley not underseeded with a legume, fallow cropland (including summer fallow, post-harvest, and set-aside acres) and land in the Conservation Reserve Program (CRP)

alfalfa	nightshade, cutleaf
artichoke, Jerusalem	nightshade, hairy
buckwheat, wild	pennycress, field (fanweed)
burdock, common	pigweed, redroot
chamomile, false (scentless)	pineappleweed
chamomile, mayweed (dogfenel)	plantain
clover, sweet	radish, wild
clover, red	ragweed, common
cocklebur, common	ragweed, giant
coffeeweed	salsify, meadow (goatsbeard)
cornflower (bachelor button)	shepherdspurse
dandelion	sicklepod
dock, curly	smartweed, Pennsylvania
flixweed <sup>1</sup>	sorrel, red
groundsel, common	sowthistle, annual
hawkbeard, narrowleaf	sowthistle, perennial <sup>1</sup>
horseweed	starthistle, yellow
jimsonweed	sunflower, common
knapweed, diffuse	tansymustard, pinnate <sup>1</sup>
knapweed, Russian <sup>1</sup>	thistle, Canada
knapweed, spotted	thistle, musk
kochia (2-4 leaf) <sup>1</sup>	thistle, Russian (1-3 leaf)
ladythumb	velvetleaf
lambsquarters, common	vetch
lettuce, prickly	volunteer beans
mustard, tumble (Jim Hill)	volunteer lentils
mustard, wild	volunteer peas

<sup>1</sup> These weeds may only be suppressed. Suppression is a visual reduction in weed competition (reduced population or vigor) as compared to untreated areas. The degree of weed control and duration of effect will vary with weed size and density, spray rate and coverage, and growing conditions before, during and after the time of treatment. For perennial weeds, CURTAIL Herbicide will control the initial topgrowth and inhibit regrowth during the season of application (season-long control). At higher use rates shown on this label, CURTAIL Herbicide may cause a reduction in shoot regrowth in the season following application, however, plant response may be inconsistent due to inherent variability in shoot regrowth from perennial root systems.

**Timing:** Apply to actively growing weeds. Extreme growing conditions such as drought or near freezing temperatures prior to, and following time of application may reduce weed control and increase the risk of crop injury at all stages of growth. Only weeds which are emerged at the time of application will be affected. Wet foliage at the time of application may decrease control. The CURTAIL Herbicide treatment will be rainfast within 6-8 hours after application.

**Rate:** Generally, lower labeled application rates will be satisfactory for young, succulent growth of sensitive weed species. For less sensitive species, perennials and under conditions where control is more difficult (plant stress conditions such as drought or extreme temperatures, dense weed stands and/or larger weeds) the higher rates will be needed. Weeds in fallow or other areas where crop competition is not a factor will generally require higher rates to obtain control or suppression.

**Coverage:** Adequate spray coverage and drift control are important. Obtaining a balance between spray coverage and drift control may sometimes be difficult but can be achieved,

provided the applicator understands the factors affecting coverage and drift. Factors affecting spray coverage include spray volume, crop canopy and weed density. As crop canopy and weed density increase, spray volume should be increased to obtain equivalent weed control. Refer to manufacturer's recommendations for information on the relationship between gallons per acre, spray pressure, sprayer speed, nozzle type and arrangement, nozzle height above the target canopy, droplet size and drift potential for respective application equipment. Do not apply less than 2 and not more than 40 gallons per acre total spray volume. For best results, apply 5 or more gallons per acre by air and 10 or more gallons per acre by ground. Reducing total spray volume may result in decreased coverage and weed control. Use enough total spray volume and a delivery system to provide thorough coverage and a uniform spray pattern. Do not apply where spray drift may be a problem due to proximity of susceptible crops or other desirable plants.

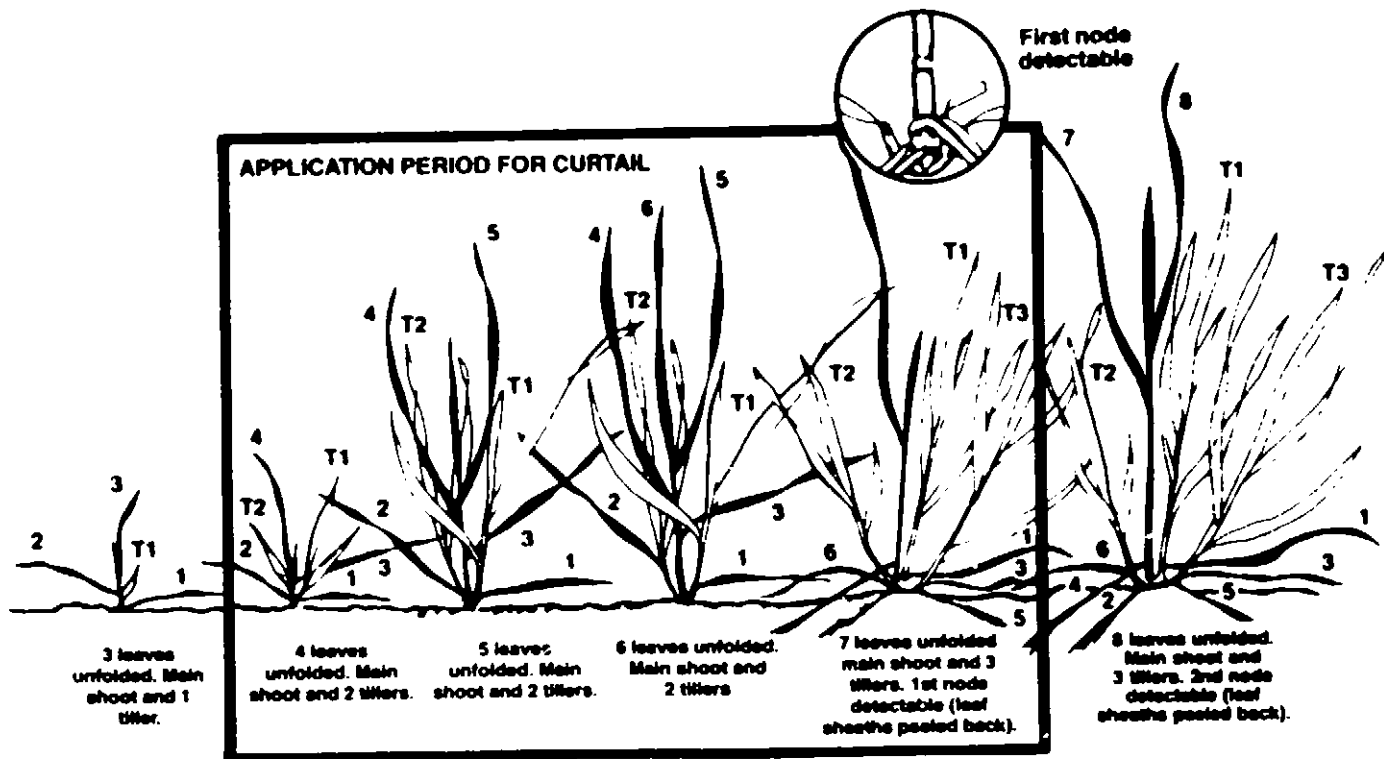
**Use of Surfactants:** Addition of wetting and/or penetration agents is not usually necessary when using CURTAIL Herbicide; however, if a surfactant will be added to the spray solution, use a nonionic surfactant approved for use on growing crops, such as X-77, of at least 80% active ingredient and do not exceed 4 pints per 100 gallons of spray solution (0.5% v/v). Adding a surfactant to the spray mixture may increase effectiveness on weeds but may reduce selectivity to the crop, particularly under conditions which promote plant stress.

**Use With Sprayable Liquid Fertilizer Solutions:** CURTAIL Herbicide is compatible with most non-pressurized liquid fertilizer solutions, however, if these solutions are to be sprayed with CURTAIL Herbicide, a compatibility test (jar test) should be made prior to mixing. Jar tests are particularly important when a new batch of fertilizer or pesticide is used, when water source changes, or when tank mixture ingredients or concentrations are changed. A compatibility test is performed by pouring the spray components (in the desired order and proportions) into a clear glass jar before mixing in the spray tank. Use of a compatibility aid such as UNITE or COMPEX may help obtain and maintain a uniform spray solution during mixing and application. Agitation in the spray tank must be vigorous to compare with jar test agitation. For best results, liquid fertilizer rates should not exceed 50% of the total spray volume. Premix CURTAIL Herbicide with water and add to the liquid fertilizer/water mixture while agitating contents of the spray tank. Apply the spray the same day it is prepared while maintaining continuous agitation. NOTE: Foliar-applied liquid fertilizers can cause yellowing or leaf burn of crop foliage.

## Wheat and Barley

**Timing:** Apply CURTAIL Herbicide in the spring to actively growing wheat or barley once 4 leaves have unfolded on the main stem and tillering has begun up to the jointing stage (first node of main stem detectable). To control or suppress weeds listed above, make application after maximum emergence of the target weeds but before they exceed 3 inches in height or diameter (for rosettes). To obtain season-long control of perennial weeds such as Canada thistle, apply after the majority of the weed's basal leaves have emerged from the soil, but before bud stage. A later timing of application (when the grain is between the jointing and boot stages) may be used to treat later-emerging weeds, however, this may increase the risk of crop injury. Do not apply after the boot stage. NOTE: Do not permit dairy animals or meat animals being finished for slaughter to forage or graze treated grain fields within 1 week after treatment. Do not harvest hay from treated grain fields.

**Rate:** Apply 2 to 2½ pints of CURTAIL Herbicide per acre. The higher rate may be used when the condition of the weeds and/or crop at the time of treatment may prevent optimum control. Note: Higher rates of CURTAIL Herbicide or CURTAIL Herbicide applications following spring postemergence treatments with 2,4-D or MCPA may increase the risk of crop injury.



**Tank Mixtures for Wheat and Barley:** This product may be tank mixed with the following herbicides for control of additional weeds in wheat and barley. Read and follow the label of each tank mix product used for precautionary statements, directions for use, weeds controlled and geographic and other restrictions. When tank mixing, use in accordance with the most restrictive of label limitations and precautions. No label dosages should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

Active Ingredient	Product	Formulation	Amount of Product Per Acre
bromoxynil <sup>1</sup>	Buctri <sup>1</sup>	2 lb/gal	¼ to 1 pt
	Buctri 4EC	4 lb/gal	¼ to ½ pt
	Buctri ME4		
chlorsulfuron	Glean	75% DF	¼ to ½ wt oz
	Barvel	4 lb/gal	¼ to ½ pt
dicamba <sup>2</sup>	Avenge	2 lb/gal	2½ to 4 pt
	Direx 4L	4 lb/gal	1 to 1½ pt
diflufenzoquat	Diuron 4L		
	Diuron 80 WDG	80% DF	½ to 1 lb
	Diuron DF	80% WP	
		4 lb/gal	Up to ½ pt
MCPA or 2,4-D <sup>2</sup>			
metribuzin	Lanone DF	75% DF	2½ to 4 wt oz
	Sencor DF		
metasulfuron			
methyl	Ally	60% DF	¼ wt oz
terbutryn	Igran 80 WP	80% WP	6 to 10 wt oz
thiameturon	Harmony	75% DF	½ to ½ wt oz

<sup>1</sup> Buctri<sup>1</sup> or Barvel tank mixes with CURTAIL Herbicide may be useful in broadening the annual weed control spectrum but may reduce control of perennials, such as Canada thistle

<sup>2</sup> Note: Do not tank mix CURTAIL Herbicide with 2,4-D or dicamba unless the risk of crop injury is acceptable

### Fallow Cropland

**Timing:** CURTAIL Herbicide can be applied either postharvest, in the spring/summer (during fallow period) or to set-aside acres to control or suppress weeds listed above (refer to rotation restrictions). Apply to young, emerged weeds under conditions that promote active growth. For best results on tough perennial weeds such as Canada thistle, apply after the majority of the basal leaves have emerged, but before bud stage. Later applications may result in less consistent control. Extreme growing conditions (such as drought or near freezing temperatures) prior to, at, and following the time of application may reduce weed control.

For best results, wait 14 to 20 days after application before cultivating or fertilizing with shank-type applicators to allow for thorough translocation. To avoid potential phytotoxicity, allow at least 20 days after application before seeding to wheat, barley or grasses.

**Rate:** Apply 2 to 4 pints of CURTAIL Herbicide per acre. Use the higher rate on perennial weeds or when the condition of the weeds at time of treatment may prevent optimum control.

**Tank Mixtures For Fallow Cropland:** To improve control of certain broadleaf weeds, CURTAIL Herbicide at 2 pints per acre may be applied with up to 1.5 lb as per acre additional 2,4-D or MCPA. When mixing, read and follow the label of each tank mix product used for precautionary statements, directions for use, weeds controlled and geographic and other restrictions. When tank mixing, use in accordance with the most restrictive of label limitations and precautions. No label doses should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

### Grasses Grown for Seed

**Timing:** Apply only to established grasses before the boot stage. Applications in the boot stage and beyond will result in increased injury. Do not apply to bentgrass unless injury can be tolerated.

**Rate:** Use 2 to 4 pints of CURTAIL Herbicide per acre for control of annual weeds and Canada thistle. The potential for crop injury exists due to the 2,4-D component of this product and must be balanced against the benefits of improved weed control.

Note: Do not graze (dairy) cattle in treated areas for 14 days after application. Remove meat animals from freshly treated areas for 7 days before slaughter. Withdrawal is not needed if 2 weeks or more have elapsed since application. Do not cut treated grass for hay within 30 days after application.

### Conservation Reserve Program (CRP)

For Seeding To Permanent Grasses Only Do not use CURTAIL Herbicide if legumes or bentgrass are a desired cover during CRP.

Grass grown on CRP acres cannot be grazed or used for hay.

Conditions that stress grasses, such as drought, will increase potential for injury to the grass at all stages of growth. Do not use in newly seeded areas until grass is established.

Timing: CURTAIL Herbicide can be applied when perennial grasses have become established (tillering, with at least 1.5 inches secondary roots, and good vigor). For control of weeds such as musk thistle (after rosette stage), Canada thistle and knapweed (diffuse, spotted and Russian), apply to actively growing weeds after the majority of the basal leaves have emerged, but before new leaves. Later applications may result in less consistent control.

Rate: Apply 2 to 5 quarts of CURTAIL Herbicide per acre

### USE PRECAUTIONS

Apply only once per 12-month period.

This product can affect susceptible broadleaf plants directly through foliage and indirectly by root uptake from treated soil. Therefore, do not apply CURTAIL Herbicide directly to or allow spray drift to come in contact with vegetables, flowers, grapes, tomatoes, potatoes, beans, lentils, peas, alfalfa, sunflowers, soybeans, safflower, or other desirable broadleaf crops and ornamental plants or soil where these sensitive crops will be planted the same season.

Do not contaminate irrigation ditches or water used for irrigation or domestic purposes.

Do not plant or rotate to any crop for one year after treatment, except for wheat, barley, oats, grass or sugar beets. To avoid potential phytotoxicity, do not plant peas, lentils, beans (except soybeans) or broadleaf seed crops for 18 months after treatment unless the risk of injury is acceptable.

Avoid Spray Drift: Applications should be made to avoid spray drift since very small quantities of the spray, which may not be visible, may severely injure susceptible crops during both growing and dormant periods. Use coarse sprays to minimize drift since, under adverse weather conditions, fine spray droplets may drift a mile or more. Fine droplets can present a drift hazard. A drift control or deposition agent such as NALCO-TROL may be used with this product to aid in reducing spray drift. If used, follow all use recommendations and precautions on the product label.

Ground Application: To minimize spray drift, apply CURTAIL Herbicide in a total spray volume of 10 or more gallons per acre as a large-droplet, low pressure spray. Refer to manufacturer's recommendations for additional information on gallons per acre, spray pressure, sprayer speed, nozzle types and arrangements, nozzle heights above the target canopy, etc., for respective application equipment. Spot treatments should only be applied with a calibrated boom to prevent misapplication. With ground equipment, spray drift can be lessened by keeping the spray boom as low as possible; by applying no more than 20 gallons of spray per acre; by using no more than 30 pounds spraying pressure with large droplet-producing nozzle tips; by spraying when wind velocity is low; and by stopping all spraying when wind exceeds 6 to 7 mph as per hour. Do not apply with hollow cone-type insecticide or other nozzles that produce a fine-droplet spray.

Aerial Application: With aircraft, drift can be lessened by applying a coarse spray; by using no more than 30 pounds spray pressure at the nozzle; by using straight-stream nozzles directed straight back; by using a spray boom no longer than 3/4 the wing span of the aircraft; and by spraying only when wind velocity is less than 6 mph.

Do Not Apply By Aircraft When An Air Temperature Inversion Exists. Such a condition is characterized by little or no wind and with lower air temperature near the ground than at higher levels. The use of a smoke device on the aircraft or continuous smoke column at or near site of application will indicate air direction and velocity, and whether a temperature inversion is present, which is shown by layering of the smoke.

Do not move treated soil and avoid situations where treated soil particles may blow into areas where susceptible crops are grown. Violent windstorms may move soil particles. If the product is on soil particles and they are blown onto susceptible plants, visible symptoms may appear. Serious injury is unlikely. The hazard of movement of this product on dust is reduced if treated fields are irrigated or if rain occurs shortly after application.

Straw from treated areas, or manure from animals have grazed treated areas, cannot be used for composting or mulching on ground where susceptible crops may be grown the following season. To promote herbicide decomposition, plant material should be evenly incorporated or burned.

Do not use in a greenhouse. Excessive amounts of this herbicide in the soil may temporarily inhibit seed germination or plant growth.

Do not contaminate water when disposing of equipment washwaters. Apply this product only as specified on this label.

Do not transfer livestock from treated grazing areas into sensitive broadleaf crop areas without first allowing 7 days of grazing on an untreated pasture. Otherwise, urine may contain enough clopyralid to cause injury to sensitive broadleaf plants.

### PRECAUTIONARY STATEMENTS

#### Environmental Hazards

Clopyralid is a chemical which can travel (seep or leach) through soil and under certain conditions contaminate groundwater which may be used for irrigation or drinking purposes. Users are advised not to apply clopyralid where soils have a rapid to very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow, or to soils containing sinkholes over limestone bedrock, severely fractured surfaces, and substrates which would allow direct introduction into an aquifer. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Storage: Store above 10°F or warm and agitate before use.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Metal Do not reuse container. Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Container Disposal: Plastic** Do not reuse container. Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## WARRANTY LIMITATIONS AND DISCLAIMER

The Dow Chemical Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions therein under normal conditions of use. **THIS IS THE ONLY WARRANTY MADE ON THIS PRODUCT. NO OTHER EXPRESS AND NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE OUTSIDE OF THIS LABEL.** Therefore, neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), under abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes, etc.) or under conditions not reasonably foreseeable to or beyond the control of seller.

When buyer or user suffers losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability, or other legal theories), buyer or user must promptly notify in writing The Dow Chemical Company of any claims to be eligible to receive either remedy given below. **THE EXCLUSIVE REMEDY OF THE BUYER OR USER and the LIMIT OF LIABILITY of The Dow Chemical Company or any other seller will be one of the following, at the election of The Dow Chemical Company:**

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

The seller will not be liable for consequential or incidental damages or losses.

The terms of this Warranty Limitations And Disclaimer cannot be varied by any written or verbal statements or agreements. Any employee or sales agent of the seller is not authorized to vary or exceed the terms of this Warranty Limitations And Disclaimer in any manner.

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SPECIMEN LABEL 86-1930 DATE CODE A1288  
REPLACES - DATE CODE 1087  
DISCARD PREVIOUS SPECIMEN LABELS

- REVISIONS INCLUDE:
- 1) FORMULA STATEMENT PERCENTAGE CHANGE
  - 2) REVISED ENVIRONMENTAL HAZARDS
  - 3) REVISED DIRECTIONS FOR USE SECTIONS
  - 4) REVISED USE PRECAUTIONS