

19713-84

4-2-2008

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

April 2, 2008

Drexel Chemical Company  
P.O. Box 13327  
Memphis, TN 38113

Subject: Drexel Carbaryl 95 Sprayable  
EPA Reg. No. 19713-84  
Application for Amended Registration-Cotton Removal  
Your Application Dated February 20, 2008

Dear Ms. Chan;

The label referred to above, submitted in connection with the registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable with the following changes:

- Revise the headings GENERAL INFORMATION to read USE INFORMATION and GENERAL USE PRECAUTIONS to read USE PRECAUTIONS.
- On the front panel state "For control of listed insect pests on Apples, Pears and Soybeans".
- Under the directions for use, specify how much product, *e.g.*, ½ pound, each packet contains. Specify not to break open or use partial contents of packets. Add a chart providing guidance as to how many packets needed to treat *x* acres at *x* application rate.
- Under SPRAY PREPARATION revise to indicate "...add the required number of packets."
- Revise IMPORTANT PRE-HARVEST AND GRAZING USE INFORMATION AND LIMITATIONS to read PRE-HARVEST AND GRAZING USE INFORMATION AND RESTRICTIONS.
- Under the heading PRE-HARVEST AND GRAZING USE... change "...without

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resulting in residues in milk or meat.” to read “...without resulting in illegal residues in milk or meat.”

- Under the heading PRE-HARVEST AND GRAZING USE... delete reference to cotton forage.
- Under the heading PRE-HARVEST AND GRAZING USE... add “Do not use reclaimed irrigation water from crops treated with carbaryl on crops for which carbaryl tolerances are not established.”
- Under the heading PRE-HARVEST AND GRAZING USE... add “Do not plant rotational food and feed crops not listed on this label or other carbaryl labels in carbaryl.
- Revise the sentence “Apply when insect or their damage appears and repeat at 7 to 14 day intervals or as necessary unless shorter intervals are specific below” to read “Apply when insect or their damage appears and repeat at intervals specified below.”
- Revise “Follow directions for most effective use.” to read “Follow directions for use.”
- Under the directions for use for use on apples and pears, add the following language to the RESTRICTIONS AND PRECAUTIONS box:

RESTRICTIONS AND PRECAUTIONS: On apples, avoid use during the period from full bloom until 30 days after full bloom unless fruit thinning is desired. Use for pest control during this period may result in fruit removal. Do not apply to quince. Do not use on pears between the tight flower cluster up to 20 mm fruit size. Use during this period may result in undesirable fruit thinning and/or deformed fruit. Do not apply within 3 days of harvest. Do not apply more than a total of 16 pounds per acre per crop per year. Do not make more than 8 applications per crop per year.

FOR PROTECTION OF HONEYBEES: Remove bee hives from orchard to be treated prior to application. Do not apply this product if bees are actively foraging in orchard. If weed bloom is present, mow cover crop on the orchard floor prior to applying this product.”

- Under DIRECTIONS FOR USE revise the sentence “Recommended dosages refer to pounds...” to read “Specified dosages refer to pounds...”
- Revise “OUR RECOMMENDATIONS FOR USE...” to read “The directions for use...”
- Everywhere the term “per crop” appears, substitute this with “per crop per year.”
- Specify what the net contents of the product are.

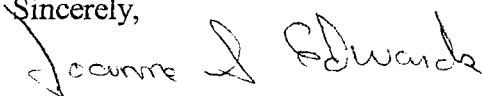
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A stamped copy is enclosed for your records. Please submit one copy of the final revised printed label before releasing the product for shipment.

Approval of this label does not constitute approval of your application for reregistration of this product. Product reregistration is currently pending, and future labeling changes and/or additional data may be required.

If you have questions, contact me at [Edwards.joanne@epa.gov](mailto:Edwards.joanne@epa.gov) or by telephone at (703) 305-6736.

Sincerely,



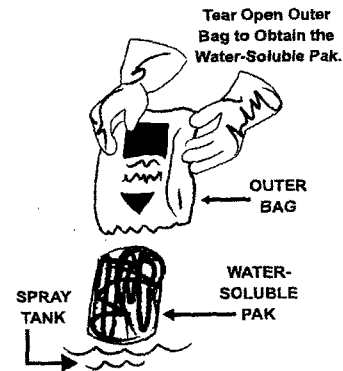
Joanne S. Edwards, Entomologist  
Insecticide-Rodenticide Branch  
Registration Division (7505C)

ACCEPTED  
WITH COMMENTS  
In EPA Letter Dated

4-2-08

19713-87

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# Carbaryl 95 Sprayable

Wettable Powder

For control of insect pests on Apples, Pears and Soybeans.

**ACTIVE INGREDIENT:**

Carbaryl .....	95.0%
<b>OTHER INGREDIENTS:</b> .....	<b>5.0%</b>
<b>TOTAL:</b> .....	<b>100.0%</b>

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

See FIRST AID Below

EPA Reg. No. 19713-84

EPA Est. No. 19713-MS-001

Net Contents: \_\_\_\_\_

19713-GA-001

FIRST AID	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious or convulsing person.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.</p>	
<p><b>NOTE TO PHYSICIAN:</b> Carbaryl is a carbamate insecticide, which is a cholinesterase inhibitor. Overexposure to this substance may cause toxic signs and symptoms due to stimulation of the cholinergic nervous system. These effects of overexposure are spontaneously and rapidly reversible. Specific treatment consists of parenteral atropine sulfate. Caution should be maintained to prevent overatropinization. Mild cases may be given 1 to 2 mg intramuscularly every 10 minutes until full atropinization has been achieved and repeated thereafter whenever symptoms reappear. Severe cases should be given 2 to 4 mg intravenously every 10 minutes until fully atropinized, then intramuscularly every 30 to 60 minutes to maintain the effect for at least 12 hours. Dosages for children should be appropriately reduced. Complete recovery from overexposure is to be expected within 24 hours. Narcotics and other sedatives should not be used. Further, drugs like 2-PAM (pyridine-2-aldoxime methiodide) are NOT recommended.</p>	

**PRECAUTIONARY STATEMENTS**  
**Hazards to Humans and Domestic Animals**  
**CAUTION:** Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with eyes, skin or clothing.  
**PERSONAL PROTECTIVE EQUIPMENT (PPE)**  
 Some materials that are chemical-resistant to this product are made of any waterproof material. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.  
**Handlers using airblast equipment or high pressure handwand equipment must wear:** Coveralls over long-sleeved shirt and long pants, chemical-resistant gloves, chemical-resistant footwear plus socks, chemical-resistant headgear, and a NIOSH-approved dust/mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N, R, P or HE filter.  
**All other mixers, loaders, applicators, and handlers must wear:** Long-sleeved shirt and long pants, shoes plus socks, chemical-resistant gloves, chemical-resistant apron, if mixing, loading drenching, dipping, or cleaning equipment or spills; plus a NIOSH-approved dust/mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N, R, P, or HE filter for all handlers, except mixers and loaders.  
**Application by air or through irrigation systems is prohibited.**  
**See engineering controls for additional requirements and exceptions.**  
 Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.  
 Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

**ENGINEERING CONTROLS**  
 Water-soluble packaging when used correctly qualifies as a closed mixing/loading system under the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240(d)(4)]. Mixers and loaders using water soluble packets must: Wear the personal protective equipment on this labeling for mixers and loaders, however, they do not need to wear a respirator, and be provided and have immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown, chemical resistant footwear and a NIOSH-approved dust/mist filtering respirator with NIOSH/MSHA approval number prefix TC-21C or a NIOSH-approved respirator with any N, R, P, or HE filter.  
 When applicators use enclosed cabs in a manner that meets the requirements listed in the WPS for agricultural pesticides (40 CFR 170.240(d)(5)), the handler PPE requirements may be reduced or modified as specified in the WPS.

**USER SAFETY RECOMMENDATIONS**  
**Users should:** 1) Wash hands thoroughly with soap and water before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.



Manufactured By:  
**Drexel Chemical Company**  
 P.O. BOX 13327, MEMPHIS, TN 38113-0327  
**SINCE 1972**

**ENVIRONMENTAL HAZARDS**

This product is extremely toxic to aquatic invertebrates. For terrestrial uses, 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 apply when weather conditions favor drift from area treated. Do not contaminate water by cleaning equipment or disposal of wastes. Do not contaminate water when disposing of equipment washwaters.

**BEE CAUTION:** This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. Contact your Cooperative Agricultural Extension Service for further information.

**GENERAL INFORMATION**

CARBARYL 95 Sprayable is a dry powder for dispersion in water and application as an insecticidal spray in hydraulic sprayers, mist blowers and low-gallonage ground equipment. Use in strict accordance with label directions and precautions.

**Special Directions for Preparing Low-Gallonage Spray:** In low-gallonage ground equipment—Use 50-mesh or coarser screens in entire system; nozzles should be cone type, number 3 or larger. Use clean equipment. Put about three-fourths of the required water volume in spray tank. Close off booms, start pump and maintain moderate bypass agitation while slowly adding the proper amount of this product. Add remaining water and continue to recirculate until suspension is uniform; then apply using at least 3 gallons per acre of the prepared spray. After spraying, flush tank and lines with clear water.

**Combination Spray Mixtures in Low-Gallonage Equipment:** Physical compatibility of this product with other pesticides in low-gallonage mixtures is not fully known. Before preparing large amounts, combinations should be tested by fully dispersing this product, then adding the other pesticide and the remaining portion of water. **DO NOT USE MIXTURES THAT CURDLE OR PRECIPITATE.**

Incompatibility will reduce insect control and may cause mechanical difficulties or plant injury. Use caution when applying concentrate spray mixtures. Under adverse growing conditions, combinations of this product with some phosphate pesticides may cause foliar injury.

**COMPATIBILITY**

1. This product has been effectively used without plant injury with most common insecticides, miticides, fungicides, nutrients, adjuvants and with petroleum oil as used on Citrus.
2. Compatibility can be affected by water in your locality, various surfactants and other formulation ingredients. Possible plant injury may occur under adverse conditions such as high humidity, drought, improper fertilization, etc.
3. Do not mix this product with nutrients, adjuvants and other pesticides unless your experience indicates that the mixture is effective and will not result in plant injury. If uncertain, prepare a small amount of the mixture and test on a representative portion of the crop.
4. Unstable under highly alkaline conditions. Not effective if used with alkaline materials such as Bordeaux, lime, lime sulfur and casein-lime spreaders.

**DIRECTIONS FOR WATER-SOLUBLE BAGS**

Paks containing this product are water-soluble. Do not break open to use partial contents of the water-soluble bag. Do not allow pak to become wet prior to adding to the spray tank. Do not handle paks with wet hands. To prepare the spray mixture, drop the required number of unopened paks into spray tank while filling with the appropriate amount of water. Operate the agitator while mixing. Depending on the water temperature and the degree of agitation, the paks should be completely dissolved in approximately 5 minutes from the time they are added to the water. Use the specified dosage of this product in the amount of water necessary to give complete coverage. Determine the total amount to be added to the spray tank based on the rates in the "CROP" section.

**Note:** Products containing boron and/or fertilizers will prevent the water-soluble packet from dissolving. Boron and/or fertilizer products must only be added after packet(s) have completely dissolved.

**GENERAL USE PRECAUTIONS**

1. To avoid possible injury on tender foliage, do not apply when foliage is wet or when rain or excessive humidity is expected during the next 2 days.
2. Does not control Spider mites but is compatible with most common miticides.

**IMPORTANT PRE-HARVEST AND GRAZING USE INFORMATION AND LIMITATIONS**

Tolerances established under the Federal Food, Drug and Cosmetic Act permit the sale of crops bearing probable carbaryl residues when this product is used in accordance with label directions. Pre-harvest and grazing use limitations are listed at the end of the directions for each crop use. Where no pre-harvest or grazing time limitations are stated, application can be made to the day of harvest and crops can be grazed without time delay if directions for use on the crops are followed.

If this product is used in accordance with label directions, forage and feed crops, Cotton forage and Soybean hay may be grazed or harvested for use as feed for dairy and meat animals without resulting in residues in milk or meat.

**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. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**DO NOT APPLY BY AIR.**

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry interval (REI) and notification to workers. The requirements in this box only apply to uses of this product that are covered by the WPS.

Do not enter or allow worker entry into treated areas during the REI. The REI for each crop is listed in the directions for use associated with each crop. PPE required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil or water is: Coveralls, chemical-resistant gloves made of any waterproof material and shoes plus socks.

When the REI for a crop is 7 days or longer, you must notify workers of the application by warning them orally and by posting warning signs at entrances to treated area.

Subsequent planting of food and feed crops in treated soil must be made with crops on this or other carbaryl labels.

**IMPORTANT:** The directions on this label are based on tests and field experience relating to (a) effectiveness; (b) possible injury to plants and animals; and (c) residues in food, feed, meat and milk. Follow directions for most effective use.

Recommended dosages refer to pounds of this product per acre. Where a dosage range is indicated, use lower rate on young plants, higher rates on mature plants. Use sufficient spray gallonage to obtain full coverage. This will usually vary from 3 to 40 gallons per acre depending on equipment, degree of insect infestation and stage of crop growth. Keep spray mixtures well agitated. Apply when insect or their damage appears and repeat at 7 to 14 day intervals or as necessary unless shorter intervals are specified below.

Crop	Pest	This Product Per Acre (lbs.)
Soybeans (REI = 2 days)	Bean leaf beetles, Blister beetles, Cucumber beetles, Green cloverworms, Mexican bean beetles, Velvetbean caterpillars	0.5 to 1.0
SPECIFIC DIRECTIONS: Repeat applications as necessary up to a total of 4 times but not more often than once every 7 days. Use lower rates for light to moderate populations and small instars and to provide maximum survival of beneficial insects and spiders. Use the high rate for heavy populations and larger instars.		
Corn earworms		0.5 to 1.6
SPECIFIC DIRECTIONS: Repeat applications as necessary up to a total of 4 times, but not more often than once every 7 days. Use lower rates for light to moderate populations and small instars and to provide maximum survival of beneficial insects and spiders. Use the high rate for heavy populations and larger instars.		
Alfalfa caterpillars, Bean leaf beetles, Cucumber beetles, Green cloverworms, Japanese beetles, Leafhoppers, Three-cornered alfalfa hoppers, Thrips, Velvetbean caterpillars		1.6
SPECIFIC DIRECTIONS: Repeat applications as necessary up to a total of 4 times, but not more often than once every 7 days. Use lower rates for light to moderate populations and small instars and to provide maximum survival of beneficial insects and spiders. Use the high rate for heavy populations and larger instars.		
Army worms, Cutworms, European corn borer, Gall armyworms, Stink bugs, Tarnished plant bugs, Webworms		1 to 1.6
SPECIFIC DIRECTIONS: Repeat applications as necessary up to a total of 4 times but not more often than once every 7 days. For Cutworm control, this product is most effective against species which feed on the upper portions of the plant. Use lower rates for light to moderate populations and small instars and to provide maximum survival of beneficial insects and spiders. Use the high rate for heavy populations and larger instars.		
<b>RESTRICTIONS AND PRECAUTIONS:</b> Do not apply within 14 days of grazing or harvest for forage or within 21 days of harvest of Dried Beans, Seed, or Hay. Do not apply more than a total of 6.3 pounds per acre per crop. Observe plant response precautions. Do not apply a combination of this product and 2,4-DB herbicide (such as "Butyrac" 175 or "Butoxone" SB) to Soybeans.		

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Crop	Pest	This Product Per Acre (lbs.)
Apples, Pears (REI = 12 hours)	White apple leafhopper	0.5 to 1.6
	SPECIFIC DIRECTIONS: Repeat applications as necessary up to a total of 8 times per crop (including thinning sprays on apples), but not more often than once every 14 days.	
	Apple aphid, Codling moth	1.0 to 3.1
	SPECIFIC DIRECTIONS: Repeat applications as necessary up to a total of 8 times per crop (including thinning sprays on apples) but not more often than once every 14 days.	
	Apple aphids, Apple maggot, Apple mealybug, Apple rust mites, Bagworms, California pearslugs (Pear sawflies), Codling moths, European apple sawfly, Eyespotted bud moths, Fruitree leafroller, Green fruitworms, Gypsy moth, Japanese beetle, Lecanium scales, Lesser appleworm, Lygus bugs, Orange tortrix, Oystershell scales, Pearleaf blister mites, Pear psyllas, Pear rust mites, Periodical cicada, Plum curculio, Redbanded leafroller, Rosy apple aphid, Tentiform leafminers, Scale insects (Forbes, Lecanium, San Jose), Tarnished plant bug, Woolly apple aphids, Yellow-headed fireworm	1.6 to 3.1
SPECIFIC DIRECTIONS: Repeat applications as necessary up to a total of 8 times per crop (including thinning sprays on apples) but not more often than once every 14 days. For psylla control, apply when eggs hatch or young nymphs are present. For scale control, apply when crawlers are present. OBSERVE "BEE CAUTION".		
<b>RESTRICTIONS AND PRECAUTIONS:</b> On Apples, avoid use during the period from full bloom until 30 days after full bloom unless fruit thinning is desired. Use for pest control during this period may result in fruit removal.		

Crop	Pest	This Product Per Acre (lbs.)
Apples Only – for fruit thinning (REI = 12 hours)	—	1.0 to 3.1
	SPECIFIC DIRECTIONS: Observe "BEE CAUTION". For easily thinned varieties: apply 0.2 to 0.5 pound per 100 gal. of spray mixture. For difficult to thin varieties: apply 0.5 to 1.0 pound per 100 gal. of spray mixture. Apply between 10 and 25 days after full bloom. Factors such as tree age, variety, nutrition, previous crop, pruning, bloom and degree of set favor excessive fruit thinning with this product. Exercise caution to avoid possible yield reduction. Rates may vary depending on variety and local orchard conditions. Consult with your County Extension Service or other experts for advice on the proper use of this product.  <b>PRECAUTIONS:</b> The use of this product may result in fruit deformity under certain environmental conditions. Before using on any variety of Apples, the user must weigh the risk versus benefits when using this product, particularly when using between 80% petal fall and 6 mm fruit size. Red Delicious are more sensitive to this phenomenon and in particular, the varieties Bisbee, Red Chief and Vailee Spur are very susceptible to conditions causing fruit deformity. Precipitation and temperatures below 65°F increases the possibility of fruit deformity. The use with summer spray oils and wetting agents may increase the risk of fruit deformity and injury.	
<b>RESTRICTIONS AND PRECAUTIONS:</b> Do not apply to Quince. Do not use on Pears between the tight flower cluster up to the 20 mm fruit size. Use during this period may result in undesirable fruit thinning and/or deformed fruit. Do not apply within 3 days of harvest. Do not apply more than a total of 16 pounds per acre per crop. Do not make more than a total of 8 applications per crop.		
<b>FOR PROTECTION OF HONEYBEES:</b> Remove all bee hives from orchard to be treated prior to application. Do not apply this product if bees are actively foraging in orchard. If weed bloom is present, mow the cover crop on the orchard floor prior to applying this product.		

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Storage should be under lock and key and secure from access by unauthorized persons and children. Storage should be in a cool, dry area away from any heat or ignition source. Do not stack over 2 pallets high. Move bags carefully so as not to tear or puncture. Do not move containers from one area to another unless they are securely sealed. Keep container tightly sealed when not in use. Do not allow material to become wet or store in a damp, humid area. Keep away from any puncture source. Avoid storage near water supplies, food, feed and fertilizer to avoid contamination. Store in original container only. If the contents are leaking or material is spilled, follow these steps:

1. Collect and place in suitable containers for disposal.
2. Wash area with soap and water to remove remaining pesticide.
3. Follow washing with clean water rinse.
4. Do not allow runoff to enter sewer or contaminate water supplies.
5. Dispose of waste as indicated below:

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

## WARRANTY—CONDITIONS OF SALE

OUR RECOMMENDATIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully, timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

To the extent consistent with applicable law, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.