

# POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Cheminova

# Ethephon 720 SL

## Growth Regulator

**ACTIVE CONSTITUENT: 720 g/L ETHEPHON (an anti-cholinesterase compound)**

**For crop thinning, loosening or ripening in various crops, for accelerating boll opening, defoliation and pre-conditioning before defoliation of cotton, and for anti-lodging in barley as specified in the Directions for Use Table**

**IMPORTANT: READ THE ATTACHED BOOKLET BEFORE USING THIS PRODUCT**

### Contents 200L

Cheminova Australia Pty Ltd ABN 59 472 616 773 / ACN 110 199 169

12 Julius Avenue, North Ryde, NSW 2113

Telephone: 1800 624 597 • [www.cheminova.com.au](http://www.cheminova.com.au)



140423-200F

Batch No:

Date of Manufacture

 **CHEMINOVA**  
HELPING YOU GROW

## DIRECTIONS FOR USE

### RESTRAINTS

DO NOT apply to weak or stressed plants.

DO NOT apply Cheminova Ethephon 720 SL following application of sodium chlorate, magnesium chlorate or diquat.

DO NOT apply if cotton buds have been killed by frost.

DO NOT apply if rain is expected within 8 hours of application.

DO NOT apply if mean day/night temperatures are expected to fall below 18°C.

DO NOT mix with hard (alkaline) water.

DO NOT apply before sufficient mature unopened bolls have developed to produce the desired yield.

CROP	ACTION	STATE	RATE (High Volume)
<b>Apples</b> Jonathon, Delicious	Advancement of maturity, improvement of red colour	Qld, NSW, ACT, Vic, SA, WA only	35-65 mL plus recommended rate of a suitable wetter (refer to Compatibility section) per 100 L water and add "stop drop"
Tydeman's Early		Tas only	25 mL/100 L water (add "stop drop")
Gravenstein, Golden Delicious, Jonathan and Red Delicious	Thinning*	Vic, SA only	15 mL plus recommended rate of a suitable wetter (refer to Compatibility section) per 100 L water
Golden Delicious, Stark Crimson and Legana		Tas only	35 mL plus recommended rate of a suitable wetter (refer to Compatibility section) per 100 L water
Golden Delicious, Red Delicious, Jonathan, Granny Smith		WA only	35- 40 mL plus plus recommended rate of a suitable wetter (refer to Compatibility section) per 100 L water
Lady William			

WHP	CRITICAL COMMENTS
7 days	<p>Ensure fruit has reached marketable size before treatment and keep trees under observation after spraying. Apply 2 to 3 weeks before normal harvest period and 7 to 14 days before desired harvest date.</p> <p>Ensure fruit is picked at the correct stage of maturity, as fruit not harvested will quickly become over-ripe.</p> <p><b>Note:</b> For best results spray when temperatures are between 15° and 32°C. Continuing low temperatures will advance maturity but may reduce colouration, so use lower rate. Use higher rate for quicker response. Add a "stop drop" to prevent premature loosening of fruit. Thorough coverage is essential. Apply to fruit only for the fresh fruit market or short term storage.</p> <p>Apply at full bloom OR up to 1 week following full bloom. A second thinning spray 10 to 14 days after the Cheminova Ethephon 720 SL spray may be necessary. On Gravenstein and Golden Delicious apply carbaryl or 5 to 7.5 ppm NAA (use higher rate for maximum thinning). On Jonathan and Red Delicious apply carbaryl or 4 ppm NAA.</p> <p>Apply at the balloon blossom stage using a high volume sprayer at 4000 L/ha. DO NOT apply if rain is imminent. DO NOT use in sequence or in mixtures with NAA. If maximum temperatures are below 13°C after spraying, inadequate thinning may result, or if above 18°C excessive thinning may result.</p> <p>Only use high concentration when heavy set expected.</p> <p><b>Note: For all thinning applications – The complex nature of fruit set and the possible variable action of chemical thinners due to weather conditions, make it difficult to give set recommendations and growers should consult their local agronomist.</b></p>

<b>CROP</b>	<b>ACTION</b>	<b>STATE</b>	<b>RATE (High Volume)</b>
<b>Apples</b> All varieties	Aid complete removal of fruit from trees and encourage a biennial bearing habit (Excessive vegetative growth will be suppressed and the following bloom stimulated)	NSW, ACT, SA, WA only	65-135 mL plus recommended rate of a suitable wetter (refer to Compatibility section) per 100 L water
	Retard vegetative growth and stimulate flowering of young apple trees in the following season		65-135 mL plus recommended rate of a suitable wetter (refer to Compatibility section) per 100 L water
<b>Cherries</b> Ron's Seedling, St Margaret, Napoleon, Florence	Promote evenness of maturity; early colour development	NSW only: Young district	20 mL/100 L water
		Orange/Bathurst district	40 mL/100 L water
<b>Table Grapes</b> Barlinka	To promote early uniform colouring	NSW, ACT, SA only	15-20 mL plus recommended rate of a suitable wetter (refer to Compatibility section) per 100 L water
Red Emperor, Red Prince, Red Malaga, Cardinal, Muscat of Hamburg		NSW, ACT, Vic, SA, WA only	25-40 mL plus recommended rate of a suitable wetter (refer to Compatibility section) per 100 L water
Flame Seedless		WA only	

WHP	CRITICAL COMMENTS
7 days	<p>Apply just prior to full bloom OR 5 to 6 weeks later during early morning or late afternoon when slow drying conditions occur. Ensure thorough coverage of foliage and flowers or fruit.</p> <p><b>Note:</b> Under normal weather conditions use lower rate for Delicious and higher rate for Jonathans as they are difficult to de-fruit. Consult the local Department of Agriculture for specific recommendations on other varieties. Warm weather following treatment will improve results, but if temperatures below 18°C prevail after spraying, fruit removal may be reduced, in the latter case use a higher dose rate. Fruit will loosen in 7 to 10 days and thinning should be complete within 2 to 3 weeks. Limbs can be lightly shaken to aid removal after this time.</p> <p>Apply from full bloom to 6 weeks after full bloom. Ensure thorough coverage. Trees should be large enough to support an increased crop of apples before being treated. Increase rate towards 135 mL/100 L to maximise thinning and stimulation of blooms during the following season.</p> <p><b>Note:</b> Better results will be achieved if daminozide at 1000 ppm is added. DO NOT apply if harvesting fruit in same season as flowers or fruitlets will be partially or completely thinned.</p>
7 days	<p><b>Treatment with Cheminova Ethephon 720 SL:</b> Apply when approximately 20% of the fruit show pink to red colour development, normally 7 to 10 days before harvest. Ensure thorough coverage of leaves and fruit.</p> <p><b>Note:</b> High temperature at spraying or following spraying may accelerate results.</p> <p>DO NOT spray when mean daily temperatures exceed 32°C.</p> <p>DO NOT spray when rain is expected within 24 hours OR when temperatures are low (17°C or less) as this will delay or reduce the effect of Cheminova Ethephon 720 SL. Fruit will mature 3 to 5 days earlier than normal and will be loosened to allow easier harvesting. A high proportion of fruit will readily separate from the stalk when harvested.</p>
14 days	<p>Apply when 5 to 30% of the berries are coloured (2-4 weeks prior to expected harvest). Use the higher rate to maximise the colouring effects required. Ensure thorough coverage of bunches although the foliage need not be completely covered.</p> <p><b>Note:</b> Cheminova Ethephon 720 SL may slightly reduce firmness of grapes. DO NOT use on grapes intended for long storage.</p>

<b>CROP</b>	<b>ACTION</b>	<b>STATE</b>	<b>RATE (High Volume)</b>
<b>Wine Grapes</b> Semillon	Aids to mechanical harvesting	NSW, ACT only	40-130 mL plus recommended rate of a suitable wetter (refer to Compatibility section) per 100 L water
<b>Mandarins</b> Imperial	Thinning to increase fruit size, to reduce size of heavy crop and to even out the production cycle	Qld, NSW, ACT, SA, WA only	35-40 mL/ 100 L water
		Vic only	25-35 mL/100 L water
NSW, ACT, WA only		35-40 mL/100 L water	
NSW, ACT, SA, WA only			
<b>Oranges</b> Navel	Valencia	Vic only	40-45 mL/100 L water
<b>Macadamia Nuts</b> Own Choice		NSW, ACT, WA only	165 mL plus recommended rate of a suitable wetter (refer to Compatibility section) per 100 L water
H2 Variety			55-105 mL plus recommended rate of a suitable wetter (refer to Compatibility section) per 100 L water
<b>Peaches</b>	Advancement and concentration of maturity	Vic only: Goulburn Valley	15 mL plus recommended rate of a suitable wetter (refer to Compatibility section) per 100 L water

WHP	CRITICAL COMMENTS
7 days	<p>Apply 7 days before expected harvest. Thorough coverage of upper and lower leaf surfaces is essential.</p> <p><b>Note:</b> Some leaf yellowing and leaf fall, which is not detrimental to vines, may occur. The concentration to use will depend on a number of factors such as seasonal conditions, crop size, weather conditions, before and after application, and trellis type. Therefore, before applying consult the local Department of Agriculture for specific recommendations.</p>
Not required	<p>Apply during the early stage of fruit development for thinning and correction of the habit of alternate heavy and light crops. Apply as foliar spray when fruitlets are about 10 to 15 mm in diameter and when natural fruit drop is occurring. This is usually in November in Qld, December in SA and intermediate in NSW, WA and Vic. Weather conditions influence the degree of thinning and care must be taken not to over-thin.</p> <p><b>Note:</b> Fruitlets should fall off 7 to 14 days after application. Aim to apply 13 to 15 L of spray per 4 to 5 m high tree. Use the higher rate when a very heavy crop is evident.</p> <p>DO NOT apply in cold weather (less than 18°C) OR when rain is likely within 1 to 2 days of spraying. DO NOT add surfactants or wetting agents as leaf fall may be increased. See also General Instructions.</p>
7 days	<p>Apply late March to early May when nuts are mature. Vary rate according to degree of loosening required.</p> <p><b>Note:</b> Nuts will be stimulated to fall within 10 to 14 days after spraying. Mechanical shaking may be used 7 to 10 days after spraying. Ensure thorough coverage of foliage and nuts. Ensure tops and insides of trees are adequately sprayed. A small quantity of older leaves will fall after treatment, but production will not be adversely affected. DO NOT use on Teddington variety.</p>
6 weeks	<p>Apply once as foliar spray after commencement of the final fast growth stage. Timing depends on variety. Determine by measuring twice weekly, fruit circumference, of 20 tagged fruit/block. After rapid growth stage determined, wait 3 to 4 days for further confirmation, then spray. Thorough coverage is essential.</p> <p><b>Note:</b> Instances have been recorded where this product, when applied in peaches at apparently the correct time, has resulted in premature fruit drop, fruit gumming and fruit splitting. See also General Instructions.</p>

CROP	ACTION	STATE	RATE	
			General	Boom Sprayer
<b>Pineapples</b> (plus Urea)	Initiation of flowering	Qld, WA only	80 mL + 5 kg Urea/100 L water (Apply 30 mL solution/plant)	1.6 L + 100 kg Urea in 2000 L water/ha (Boom spray)
			40 mL + 5 kg Urea/100 L water (Apply 30 mL solution/plant)	0.8 L + 100 kg Urea in 2000 L water/ha (Boom spray)
<b>Pineapples</b> (without Urea)	Initiation of flowering in ratoon		25 mL/10 L water (Apply 30 mL solution/plant)	6.0 L in 2000 L water/ha (Boom spray)
			7 mL/10 L water (Apply 30 mL solution/plant)	1.5 L in 2000 L water/ha (Boom spray)
<b>Pineapples</b>	Fruit ripening		–	1.7 L in 1000 L water/ha



WHP	CRITICAL COMMENTS
7 days	<p>Apply in March.</p> <p><b>Note:</b> Rate should be doubled for plant crops which are growing vigorously at the time of application.</p>
	<p>Apply in May-June OR September-October.</p> <p><b>Note:</b> See above – February/March application of Urea.</p>
	<p>Apply February-March.</p> <p><b>Note:</b> Use on the final crop in the block before eradication of the crop. Pineapples treated at the above time will be ready for picking 7 to 10 months after application.</p>
	<p>Apply in May-June OR September-October.</p> <p><b>Note:</b> See above – February/ March application without Urea.</p>
	<p>Cheminova Ethephon 720 SL for ripening should only be used on even crops successfully induced for flowering with Cheminova Ethephon 720 SL. DO NOT use on fields intended for ratoon production. Treatment should be made when the forced fruit are beginning to show the first colour break. An initial harvest may be necessary to remove more advanced fruit before applying Cheminova Ethephon 720 SL. The remaining treated fruit will be ready for harvest at least 7 days following the Cheminova Ethephon 720 SL ripening application.</p> <p><b>Note:</b> DO NOT use on fruit intended for the fresh fruit market. Cheminova Ethephon 720 SL for ripening is NOT SUITABLE FOR USE ON SUMMER PLANT CROPS because of scattered fruiting and high risk of forcing young suckers. Where natural fruiting has occurred prior to chemical induction, these natural fruit must be picked before Cheminova Ethephon 720 SL ripening. Treatment too early can result in a loss of yield and a reduction in fruit sugar levels.</p>

<b>CROP</b>	<b>ACTION</b>	<b>STATE</b>	<b>RATE (High Volume)</b>
<b>Barley</b>	Anti-lodging	Qld, NSW, ACT, Vic, Tas, WA only	335 or 500 mL/ha
<b>Barley</b> Weeah, Malebo, Parwan only		SA only	
<b>Sugarcane</b>	To increase early season c.c.s.	Qld, NSW only	1 L/ha
<b>Tomatoes</b>	Accelerate ripening, increasing yield	All States	1.2 L in 440-880 L water per hectare
<b>CROP</b>	<b>ACTION</b>	<b>STATE</b>	<b>RATE (High Volume)</b>
<b>Cotton</b>	Defoliation, acceleration of boll opening	Qld, NSW, ACT, WA, NT only	2.0-3.0 L in min. 20 L water
	Pre-conditioning of crop before a normal defoliation is to occur		1.3 L in min. 20 L water
	Defoliation and accelerated boll opening <sup>#</sup>		0.5-1.0 L

**NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION**

WHP	CRITICAL COMMENTS
1 day	<p>Use the higher rate on tall, vigorous crops, on varieties susceptible to heavy lodging and on irrigated crops. Apply once only, between early to late boot stage, but before awns or spikes emerge.</p> <p>DO NOT apply to crops under moisture or disease stress or to crops that have already lodged. DO NOT apply if rain is expected within 4 hours or if temperature is less than 18°C.</p>
6 weeks	<p>Apply from the beginning of March until the end of April on sugarcane to be harvested from mid June until mid August. The sugarcane juice purity should preferably be lower than 75% at the time of treatment.</p> <p>DO NOT apply to sugarcane under stress e.g. From excessive moisture, dry conditions, lodging, disease or insect infestation. Post spraying stresses will reduce the probability of response. DO NOT apply more than once a season.</p>
7 days	<p>Apply once in the season. Ensure thorough coverage of fruit and foliage, when fruit is 5 to 30% pink or red. To determine this pull a few plants, shake off all fruit, weigh and determine above percentage. Optimum harvest maturity is expected 14 to 21 days after spraying. DO NOT use on greenhouse crops.</p> <p><b>Note:</b> Temperatures below 18°C retard colour development and may extend the interval between treatment and harvest.</p> <p>Treatment may cause some yellowing of foliage or defoliation. Sun scald or exposed fruit may occur under high temperature conditions following treatment.</p>
CRITICAL COMMENTS	
<p>Application to be made when there are sufficient unopened bolls present to obtain the desired yield. Higher rates are used when the following conditions apply:</p> <ol style="list-style-type: none"> <li>On stressed plants</li> <li>On a heavy crop with plenty of foliage present</li> <li>If mean day/night temperatures are likely to drop below 22°C within 5 to 7 days of application.</li> </ol> <p>Ensure thorough and uniform coverage of bolls and leaves.</p>	
<p>Application to be made when there are sufficient unopened bolls present to obtain the desired yield. The defoliant can then be applied at a time interval 4-7 days later. Ensure thorough coverage of bolls.</p>	
<p>Use in a tank mix with a registered rate of Thidiazuron. Apply when there are sufficient unopened bolls to produce the desired yield. Total application volume should be no less than 20.0 L/ha. Ensure thorough and uniform coverage of bolls and leaves.</p> <p># This mixture will also provide some acceleration of boll opening, however a subsequent application of a boll opener may be required to complete boll opening.</p>	

## **WITHHOLDING PERIODS:**

**APPLES, CHERRIES, MACADAMIA NUTS, PINEAPPLES, TOMATOES, WINE GRAPES:  
DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.**

**TABLE GRAPES: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.**

**PEACHES AND SUGAR CANE: DO NOT HARVEST FOR 6 WEEKS AFTER APPLICATION.**

**COTTON: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.**

**GRAZING: DO NOT FEED COTTON STUBBLE OR GIN TRASH TREATED WITH CHEMINOVA  
ETHEPHON 720 SL TO LIVESTOCK.**

**DO NOT GRAZE LIVESTOCK ON TREATED AREAS.**

**BARLEY: DO NOT HARVEST FOR ONE DAY AFTER APPLICATION.**

## **GENERAL INSTRUCTIONS**

### **IMPORTANT**

#### **APPLES – ADVANCEMENT OF FRUIT MATURITY AND IMPROVEMENT OF RED COLOUR**

- Ensure fruit has reached marketable size before treatment and keep trees under observation after spraying.
- Ensure fruit is picked at the correct stage of maturity, as fruit not harvested will quickly become over-ripe.
- Continuing low temperatures will advance maturity and colouration; continuing warm to high temperatures, both day and night, will advance maturity but may reduce colouration.
- Apply to fruit only for the fresh fruit market or short term storage.

#### **APPLES – THINNING**

The complex nature of fruit and the possible variable action of chemical thinners due to weather conditions, make it difficult to give set recommendations and growers should consult their local agronomist.

#### **APPLES – FRUIT REMOVAL**

- Apply to trees to remove unwanted fruit and encourage a biennial bearing habit. Excessive vegetative growth will be suppressed and bloom the following season stimulated.
- Weather conditions are very important – warm weather following treatment will improve results, but if temperatures below 18°C prevail after spraying, fruit removal may be reduced. In the latter case, use the higher dose rate.
- Fruit will loosen in 7-10 days and thinning should be complete within 2-3 weeks. Limbs can be lightly shaken to aid removal after this time.

#### **IMPERIAL MANDARINS AND VALENCIA ORANGES:**

Apply during the early stage of fruit development for thinning and correction of the habit of alternate heavy and light crops. Weather conditions influence the degree of thinning and care must be taken not to over-thin.

#### **EXCLUSION OF LIABILITY**

As the degree of thinning may vary according to the conditions and over-thinning is possible, the decision to incur these risks is taken by the user, and the manufacturer and vendor exclude themselves from all conditions, representations, warranties, whether expressed or implied by statute or otherwise and accept no responsibility for any losses which follow from the use of the product on mandarins or oranges as far as this is legally possible under the Trade Practices Act or any State legislation.

## **BARLEY**

Use only on vigorously growing and potentially high yielding crops which are likely to lodge.

## **COTTON**

A foliar spray with Cheminova Ethephon 720 SL will accelerate opening of mature unopened bolls and enhance defoliation, which can result in earlier harvest and increased recoverable yield and quality. Some premature drop of small immature bolls may occur. Harvest at optimum boll opening and optimum defoliation. Too late harvest may reduce quality and lint.

### **APPLICATION – COTTON**

DO NOT apply before sufficient mature unopened bolls have developed to produce the desired yield of cotton. Bolls are mature when the seed coat turns light brown, the embryo fills the seed cavity with an abundance of creamy colour and cotyledons are well defined.

### **TREATMENT SEQUENCE – COTTON**

- **Light canopy:** Apply Cheminova Ethephon 720 SL then apply defoliant 4 to 7 days later.
- **Moderate to heavy canopy:** First apply a pre-conditioner, then apply Cheminova Ethephon 720 SL as soon as sufficient leaves have dropped to expose the large bolls, usually 4 to 10 days later.

### **APPLICATION METHOD – COTTON**

Apply by placement technique under the following range of conditions to achieve a target droplet density of 60 droplets per square cm.

Wind Direction: Cross Wind Wind speed range: 6-20 kph

Air Temperature: Maximum 32°C

Delta t: Maximum 10°C

## **SUGARCANE**

Cheminova Ethephon 720 SL may be applied by air or ground spray equipment. Apply in 30 L water/ha by air, and 110-150 L water/ha by ground spray equipment. Apply during March-April on cane due for harvest no later than August. Consult your local Cheminova agent or Sugar Research Australia officer.

## **TOMATOES**

- Temperatures below 18°C retard colour development and may extend the interval between treatment and harvest.
- Treatment may cause some yellowing of foliage or defoliation.
- Sun scald of exposed fruit may occur under high temperature conditions following treatment.

## **MIXING**

Half fill the spray tank with water, add the required amount of product then the remainder of water and mix well. DO NOT use alkaline water.

## **EQUIPMENT USAGE AND CLEANING**

This product is corrosive to metals. Mix only the quantity of spray required for immediate use and do not allow to stand in metal containers for longer than 2 hours. Flush equipment thoroughly after use. Use only properly calibrated and maintained spraying equipment. Wash sprayer thoroughly after use.

## **COMPATIBILITY**

### ***Apples, table grapes, wine grapes, macadamias and peaches***

Certain applications in the above crops require the addition of a surfactant (wetter) when using Cheminova Ethephon 720 SL. In such cases, select a wetter that is registered for use with plant growth regulators and apply at the recommended rate for the crop situation. If unsure of the

appropriate product or product rate, see further advice from Cheminova Australia Pty Ltd, the surfactant manufacturer, your chemical distributor or other advisor. DO NOT tank mix this product with sodium chlorate. This mixture will, when heated, emit toxic chlorine fumes.

#### **CAUTION EXPORT OF TREATED PRODUCE**

Growers should note that Maximum Residue Limits (MRLs) or import tolerances do not exist in all markets for produce treated with this product. Additionally, some export markets have established MRLs different to those in Australia. If you are growing produce for export (either fresh, dried or for wine production), please check with Cheminova Australia Pty Ltd, your industry spray diary or peak industry body (eg the Australian Wine Research Institute [www.waite.adelaide.edu.au/AWRI](http://www.waite.adelaide.edu.au/AWRI)) for the latest information on MRLs and import tolerances BEFORE using Cheminova Ethephon 720 SL.

#### **PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS**

DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures.

#### **PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT**

DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

#### **STORAGE AND DISPOSAL**

Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. The method of disposal of the container depends on the container type. Read the 'Storage and Disposal' instructions on the label that is attached to the container.

#### **SAFETY DIRECTIONS**

Product is harmful if swallowed. Attacks the eyes. Repeated minor exposure may have a cumulative poisoning effect. Protect eyes while using. When preparing spray and using the prepared spray, wear elbow length PVC gloves and face shield or goggles. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

#### **FIRST AID**

If swallowed, DO NOT induce vomiting. Give a glass or water. If swallowed, splashed on skin or in eyes, or inhaled, contact a Poisons Information Centre (Phone Australia 131126) or a doctor at once. Remove any contaminated clothing, wash skin thoroughly. If swallowed, activated charcoal may be advised. Give atropine if instructed. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

#### **SAFETY DATA SHEET**

Additional information is listed in the Safety Data Sheet available from [www.cheminova.com.au](http://www.cheminova.com.au)

**WARNING:** This product must be used, handled and stored strictly as directed in accordance with this label, packaging and other reference material ("Directions"). To the extent permitted by law Cheminova Australia Pty Ltd and its related companies will have no liability for any injury, loss or damage arising from a failure to follow the Directions.