

# Hormodin<sup>®</sup> 1

A ROOT INDUCING SUBSTANCE

SPECIMEN LABEL

## Simplifies Rooting of Cuttings

### ACTIVE INGREDIENT:

Indole-3-butyric Acid . . . . . 00.1%

**OTHER INGREDIENTS:** . . . . . 99.9%

**TOTAL:** . . . . . 100.0%

**HORMODIN 1** is a general purpose powder designed for the home gardener or commercial florist who propagates popular varieties such as roses, carnations, poinsettias, some species of shrubs, and most home, garden and greenhouse plants.

One pound of **HORMODIN 1** will treat at least 35,000 average cuttings.

**EPA Est. indicated by first and second letters of the lot number on this package.**  
**(PP) = 69697-CAN-001**

**EPA Reg. No. 59807-4**

**HORMODIN** is supplied in the following strengths:

Active Ingredient	No. 1	No. 2	No. 3
Indole-3-butyric Acid	00.1%	00.3%	00.8%
Other Ingredients	99.9%	99.7%	99.2%
EPA Reg. No.	59807-4	59807-2	59807-3

### PRECAUTIONARY STATEMENTS KEEP OUT OF REACH OF CHILDREN Hazards to Humans and Domestic Animals

## CAUTION

Causes moderate eye irritation. Wear protective eyewear (goggles, face shield or safety glasses). Harmful if inhaled or absorbed through the skin. Avoid contact with eyes, skin or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

FIRST AID	
<b>IF IN EYES:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15 - 20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</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 - 20 minutes.</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></ul>
<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 the poison control center or doctor.</li><li>• Do not give anything to an unconscious person.</li></ul>

Call a poison center or doctor for treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact OHP, Inc. at 1-800-356-4647, 24 hours / 365 days, for emergency medical treatment.

### Personal Protective Equipment (PPE) Requirements:

All pesticide handlers must wear the following minimum PPE while handling, transferring or applying this product. The minimum PPE include: long sleeved shirt, long pants, shoes, socks, protective eyewear (goggles, face shield or safety glasses) and chemical resistant or waterproof gloves.

### USER SAFETY RECOMMENDATIONS:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling the product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### Environmental Hazards

For Terrestrial Uses: Do not apply directly to water, to areas where surface water is present or intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment wash waters or rinsates.

### 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 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 regulations.

**Net Contents: 1 LB (454 grams)**



**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 and 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) and restricted-entry interval. The requirements in this box only apply to the uses of this product that are covered by the Worker Protection Standard (WPS).

**ENTRY RESTRICTIONS:** The restricted entry interval (REI) for this product is 0 hours.

## GENERAL INFORMATION

**HORMODIN** may be used on three types of cuttings;

- **Hardwood:** such as Dogwood, Juniper, broadleaf and needle evergreens.
- **Semi-Hardwood:** such as broadleaf evergreens and woody ornamentals with firm wood and mature leaves such as Azalea, Rhododendrons, Magnolia and Photinia.
- **Softwood and Succulents:** such as Cactus, Fuchsia, Ice Plant and Begonia.

Select cuttings from healthy plants. Success is generally best when taking softwood cuttings or "new wood". Timing is important. Professionals propagate year round but two good times for taking cuttings are:

- in the fall using mature dormant growth which would be classified as a hardwood or semi-hardwood cutting
- in the spring when the cutting would be new growth or classified as a softwood cutting.

Fertilizer can encourage top growth and may not be used for one week after treatment.

**HORMODIN 1, 2 or 3** are recommended for different plants and parallel the range of hormones found normally by the various plants. Refer to the following list for the correct **HORMODIN** to use for the broad field of propagation from cuttings.

## TYPE OF CUTTING TO USE

Cuttings of the current season's growth, 4 to 6 inches in length, generally are most satisfactory. Entire shoots of this length, cut at or near the base, should be taken, unless it is known that other parts root more readily. Some plants are readily propagated from leaf-bud cuttings. Propagators are familiar with the fact that tip cuttings of some varieties, and parts below the tip in other varieties, root best. This applies also, but to a lesser extent, to cuttings treated with **HORMODIN**. The basal cut may be made slanting or straight with small pruning shears, or with a knife. Large leafed types of cuttings will need to be trimmed, but it is preferable to use the largest leaf area which can be kept in good condition, and which at the same time meets the requirements for economy of space.

## TIME TO TAKE CUTTINGS

Throughout the United States, the time to take cuttings will be dependent on when new growth starts. Cuttings of the current season's growth, 4 to 6 inches in length, generally are the most satisfactory.

Note: Cuttings of certain plants can be taken over a much wider range of time in the South than in the North, and corresponding season advance must be considered.

In the State of New York, cuttings of most deciduous shrubs will root best when taken during June, July and August. A few varieties can be taken the latter part of April, and others during May, depending upon when new growth starts. Cuttings of the current season's growth, 4 to 6 inches in length, generally are the most satisfactory. Cuttings taken between August and December will vary considerably in their capacity to root.

For plants grown indoors, cuttings should be taken according to the condition of the material, without regard to season.

## CARE OF CUTTING MATERIAL

Keep cutting material in a fresh condition from the start. Cuttings of many varieties keep fresh when the basal ends of the stems are immersed in water or wrapped in wet cloth or burlap until ready to place in the **HORMODIN**. Do not keep shoots and branches in closed containers for long periods. Frequent spraying of the cutting material, according to the dryness of the air, or covering with moist cheese cloth, will prevent excessive wilting.

## PLANTING CUTTINGS AND HOW TO CARE FOR THEM

After treatment with **HORMODIN**, plant the cuttings in a mixture of 1/4 peat moss and 3/4 sand (by volume), or in sand only, until rooted. Propagators who have a satisfactory rooting medium should continue to use it. Any method of planting cuttings which keeps them in good condition may be used. When cuttings are planted in a vertical position, they require more critical care than when slanted in such a way that the exposed leaves lie flat or close to the surface of the rooting medium. Sufficient shade must be provided at all times, but particularly on hot, bright days, to keep the cuttings fresh, but not dense enough to cause rotting of leaves, or the growth of molds. Immediately after planting, the cuttings should be watered thoroughly and, thereafter, according to climactic conditions. The rooting medium below the surface must not be allowed to become dry.

A temperature in the bed of 70° to 75° F. has proved satisfactory for many species. Temperatures below 60° are not generally satisfactory with tested cuttings.

### APPLICATION OF HORMODIN:

- 1) If not already moist, the basal ends of the cuttings should be slightly moistened before treatment. (Except geraniums.)
- 2) Stir basal ends in **HORMODIN**.
- 3) Remove excess powder by tapping on rim of container.
- 4) Plant treated cuttings in rooting medium.

The following plants have been successfully rooted with **HORMODIN**.

For species not mentioned in the following list it is suggested that **HORMODIN 1** or **2** be used.

Abbreviations: Species = sp. Varieties = vars.

Common Name*	Scientific Name	HORMODIN No.
African Violet	<i>Saintpaulia</i> sp.	1
Ageratum	<i>Ageratum</i> sp.	1
Apple	<i>Malus</i> sp.	2 or 3
Arbor-Vitae (Thuja) vars.	<i>Thuja ellwangeriana aurea nana</i>	2
	<i>Thuja occidentalis</i> vars.	2 or 3
Arbutus (Trailing)	<i>Epigaea repens</i>	3
Ardisia	<i>Ardisia japonica</i>	2
Azalea	<i>R. arborescens</i> (June-Aug.)	3
(Rhododendron) vars.	<i>R. arborescens grandiflora</i>	3
	<i>R. calendulaceum</i>	3
	<i>R. canadense</i>	3
	<i>R. canescens</i>	3
	R. Christmas Cheer	1
	<i>R. colletianum</i>	3
	R. Coral Bell	1
	<i>R. dauricum</i> (June-July)	2
	<i>R. gandavense</i> (hybrids)	2
	<i>R. kosterianuma</i> Miss Louisa Hunnewell	3
	<i>R. kurume</i> vars. (June-July)	1
	<i>R. mollis</i>	2
	<i>R. mucronatum</i>	1
	<i>R. obtusa hinodigiri</i>	1
	<i>R. obtusa kaempferi</i>	1
	R. Pink Pearl	1
	<i>R. roseum</i>	3
	<i>R. schlippenbachii</i>	3
	R. Snow	1
	<i>R. vaseyi</i>	1
	<i>R. viscosum</i>	2
	<i>R. yedoense poukhanense</i>	1
Barberry	<i>Berberis</i> sp.	1
Bayberry	<i>Myrica</i> sp.	1
Beautyberry	<i>Callicarpa</i> sp.	1
Beauty Bush	<i>Kolkwitzia amabilis</i> (tips) (June-July)	3
Beech	<i>Fagus</i> sp. (Aug.)	2
Begonia	<i>Begonia</i> sp.	1
Birch	<i>Betula</i> sp.	3
Bittersweet	<i>Celastrus</i> sp.	3
Blackberry	<i>Rubus</i> sp.	1
Bluebeard	<i>Caryopteris</i> sp.	1
Blueberry	<i>Vaccinium corymbosum</i> vars.	1 or 2
Bougainvillea	<i>Bougainvillea</i> sp.	1
Bowstring Hemp (Snake Plant)	<i>Sanserveria</i>	1
Boxwood	<i>Buxus</i> sp.	3
Broom	<i>Cytisus</i> sp.	1 or 2
Butterflybush	<i>Buddleia</i> sp.	1
Camelia	<i>Camellia</i> sp.	3
Candytuft	<i>Iberis</i> sp.	1
Carnation	<i>Dianthus</i> vars.	1
Catalpa	<i>Catalpa</i> sp.	3
Chamaecyparis	<i>Chamaecyparis obtusa</i> vars.	3
(Retinospora) vars.	<i>Chamaecyparis pterisifera</i>	3
Chaste Tree	<i>Vitex</i> sp.	3
Chestnut	<i>Castanea</i> sp.	2
Chokeberry	<i>Aronia</i> sp.	2 or 3
Chrysanthemum	<i>Chrysanthemum</i> vars.	1
Cinquefoil	<i>Potentilla</i> sp.	2
Clematis	<i>Clematis</i> sp.	2
Clerodendron	<i>Clerodendron</i>	1
Clockvine	<i>Thunbergia</i> sp.	1
Coleus	<i>Coleus blumei</i>	1
Cotoneaster	<i>Cotoneaster horizontalis</i>	3
Crabapple	<i>Malus</i> sp.	2 or 3
Crape Myrtle	<i>Lagerstroemia indica</i>	1
Crassula	<i>Crassula rubicunda</i>	1
Creeper	<i>Parthenocissus</i> sp.	1

Common Name*	Scientific Name	HORMODIN No.
Croton	<i>Codiaeum</i>	1
Cryptomeria	<i>Cryptomeria</i> sp.	3
Currant	<i>Ribes tenuitorum</i>	1
Dahlia	<i>Dahlia</i> vars.	1
Daphne	<i>Daphne</i> sp.	1 or 2
Deutzia	<i>Deutzia magnifica</i>	1
Dewberry	<i>Rubus</i> sp.	1
Dianthus (See Carnation)		
Dogwood	<i>Cornus florida</i> (July)	3
Dovetree	<i>Davidia</i> sp.	1
Douglas fir	<i>Pseudotsuga</i> sp.	3
Dracaena	<i>Dracaena sardariana</i>	1
Dutchmanspipe	<i>Aristolochia</i> sp.	1
Elder	<i>Sambucus</i> sp.	1 or 2
Eleutherococcus	<i>Eleutherococcus</i> sp.	3
Elm	<i>Ulmus</i> sp. (June-July)	1
Escallonia	<i>Escallonia</i> sp.	3
Euonymus	<i>Euonymus</i> sp.	1
False arborvitae	<i>Thujaopsis</i> sp.	2
Fir	<i>Abies</i> sp.	3
Firethorn	<i>Pyracantha</i> sp.	1 or 2
Flowering Cherry vars.	<i>Prunus</i> sp. and vars.	1
Flowering quince	<i>Chaenomeles</i> sp.	3
Fontanesia	<i>Fontanesia</i> sp.	1
Forsythia	<i>Forsythia</i> sp. and vars.	1
Franklinia	<i>Gordonia alatamaha</i>	2
Fringe tree	<i>Chionanthus</i> sp.	2
Fuchsia	<i>Fuchsia</i>	1
Gardenia	<i>Gardenia florida</i>	1, 2 or 3
Geranium	<i>Geranium</i> sp.	1
Germander	<i>Teucrium</i> sp.	2 or 3
Glossy Abelia	<i>Abelia grandiflora rosea alba</i> (tips best)	1
Golden Chain	<i>Laburnum</i>	2
Grape	<i>Vitis</i> sp. and vars.	3
Hawthorne	<i>Crateagus</i> sp.	3
Hazelnut	<i>Corylus</i> sp. (June)	1 or 2
Heath	<i>Erica carnea</i> vars.	3
Heather	<i>Caluna vulgaris</i> vars.	3
Hemlock vars.	<i>Tsuga</i> sp. and vars. (Sept.-June)	2 or 3
Hibiscus	<i>Hibiscus</i> (tropical)	2
Hibiscus (Rose of Sharon)	<i>Hibiscus syriacus</i> vars. (leafy and dormant)	3
Holly (American)	<i>Ilex opaca</i>	3
	<i>Ilex pernyi</i>	3
Holly (Chinese)	<i>Ilex cornuta</i>	3
Holly (English)	<i>Ilex aquifolium</i>	3
Holly (Japanese)	<i>Ilex crenata</i> vars.	2
Honeysuckle	<i>Lonicera</i> sp.	1
Hydrangea	<i>Hydrangea</i>	1
Japanese Andromeda	<i>Pieris japonica</i>	1
Japanese Umbrella Pine	<i>Sciadopitys verticillata</i>	3
Jasmine	<i>Jasminum nudiflorum</i>	1
Jetbead	<i>Rhodotypos</i> sp.	1
Juniper vars.	<i>Juniperus chinensis</i> vars.	3
	<i>Juniperus chinensis japonica</i>	2
	<i>Juniperus chinensis pfitzeriana</i>	2
	<i>Juniperus columnis hillii</i> (dwarf)	2
	<i>Juniperus communis</i> vars.	3
	<i>Juniperus conferta</i>	3
	<i>Juniperus rigida</i>	2
	<i>Juniperus sabina fastigiata</i>	2
	<i>Juniperus squamata fargesii</i>	2
	<i>Juniperus virginiana</i> vars.	3
Kerria	<i>Kerria</i> sp.	1
Knotweed	<i>Polygonum</i> sp.	3
Laburnocytisus	<i>Laburnocytisus</i> sp.	1 or 2
Lantana	<i>Lantana</i> sp.	1
Laurel	<i>Kalmia</i> sp.	3
Lavender	<i>Lavandula</i> sp.	1
Leucothoe	<i>Leucothoe</i> sp.	2
Lilac (French-Hybrids)	<i>Syringa vulgaris</i> vars. (April 15-May 25)	3
Lily Scales	<i>Lilium</i> (scales)	1 or 2
Linden	<i>Tilia</i> sp.	1

Common Name*	Scientific Name	HORMODIN No.
Locust	<i>Robinia</i> sp.	3
Magnolia	<i>Magnolia</i> sp.	2 or 3
Maidenhair Tree	<i>Ginkgo biloba</i>	2
Manzanita	<i>Arctostaphylos</i> sp.	3
Maple (Japanese) vars.	<i>Acer japonicum palmatum</i> vars.	3
Matrimony Vine	<i>Lycium halimifolium</i>	3
Melastoma	<i>Melastoma</i>	1
Mock Orange	<i>Philadelphus</i> sp.	1
Mulberry	<i>Morus alba</i>	1
Ninepark	<i>Physocarpus</i> sp.	3
Oak	<i>Quercus</i> sp.	3
Oleander	<i>Oleander nerium</i>	2
Olive	<i>Olea</i> sp.	3
Orange (sour)	<i>Citrus aurantium</i>	3
Orixa	<i>Orixa</i> sp.	1
Osage Orange	<i>Maclura</i> sp.	1
Osmanthus	<i>Osmanthus</i> sp.	2
Pachysandra	<i>Pachysandra terminalis</i>	2 or 3
Pea Shrub	<i>Caragana</i> sp.	1
Pear (stock)	<i>Pyrus serotina</i>	1
Pecan	<i>Pecan</i>	3
Penstemon	<i>Penstemon</i> sp.	1
Periwinkle	<i>Vinca</i> sp.	2
Petunia	<i>Petunia</i> sp.	1
Philodendron	<i>Philodendron</i> sp.	1
Phlox	<i>Phlox</i> sp.	1
Photinia	<i>Photinia</i> sp.	1
Pine	<i>Pinus</i> sp.	2 or 3
Poinsettia	<i>Euphorbia</i> vars.	1
Poplar	<i>Populus</i> sp.	1
Pricklypear Cactus	<i>Opuntia</i> sp.	1
Privet	<i>Ligustrum ovalifolium</i>	3
Raspberry	<i>Rubus</i> sp.	1
Rhododendron vars.	<i>Rhododendron</i> (hybrids)	3
	<i>Rhododendron catawbiense</i> hybrids	3
	<i>Rhododendron wilsonii</i>	3
Rose	<i>Rosa</i> vars.	1

Common Name*	Scientific Name	HORMODIN No.
Russian olive	<i>Elaeagnus</i> sp.	3
Sage	<i>Salvia</i> sp.	1
Sequoia (Giant)	<i>Sequoia gigantea</i>	2
Silverbell	<i>Halesia</i> sp.	2
Snaptadragon	<i>Antirrhinum</i> sp.	1
Snowbell	<i>Styrax</i> sp.	3
Snowberry	<i>Symphoricarpos</i> sp.	1
Sourwood	<i>Oxydendrum</i> sp.	3
Speedwell	<i>Veronica</i> sp.	1
Spirea	<i>Spirea</i> sp.	1
Springscent (Witchalder)	<i>Fothergilla major</i>	2
Spruce (Blue)	<i>Picea pungens</i>	2
Spruce (Norway) vars.	<i>Picea excelsa</i> vars. (Nov.-Feb.)	1
Stevia	<i>Stevia</i> sp.	1
Stewartia	<i>Stewartia pentagyna</i>	1
St. John's Wort	<i>Hypericum</i> sp.	1
Sweetleaf	<i>Symplocos</i>	1
Taxus (See Yew)		
Trifoliolate-Orange	<i>Poncirus</i> sp.	2
Trumpet creeper	<i>Campsis</i> sp.	1
Tuliptree	<i>Liriodendron</i> sp.	3
Verbena	<i>Verbena</i> sp.	1
Viburnum	<i>Viburnum</i> sp.	1
Waxmyrtle	<i>Myrica</i> sp.	1
Weigela	<i>Diervilla</i> sp.	1
Willow	<i>Salix</i> sp.	1
Wintergreen	<i>Gaultheria</i> sp.	2
Wisteria	<i>Wisteria</i> sp.	2
Witch Hazel	<i>Hamamelis</i> sp.	2
Yellowwood	<i>Cladrastis</i> sp.	2
Yew	<i>Taxus baccata</i> vars.	3
	<i>Taxus cuspidata</i> vars.	3
	<i>Taxus media hatfieldii</i>	3
	<i>Taxus media hicksii</i>	3
Zelkova	<i>Zelkova</i> sp.	2

\* Standardized Plant Names

### STORAGE AND DISPOSAL

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

**STORAGE:** Store in a cool dry place. Keep in original container.

**PESTICIDE DISPOSAL:** Pesticide or rinse waters that cannot be used according to label instructions must be disposed of according to applicable Federal, State or local procedures under the Resource Conservation and Recovery Act. Wastes resulting from the use of the product may be disposed on site or at an approved waste disposal facility.

Nonrefillable container. Do not reuse or refill this container.

**CONTAINER DISPOSAL:** (metal/plastic container): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

**NOTICE OF WARRANTY** — OHP, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions for Use**. To the extent applicable by law, buyer assumes all risks of use and handling which are a variance in any way with the directions hereon. To the extent applicable by law, OHP, Inc. makes no other express or implied warranty of Fitness or Merchantability of any other express or implied warranty. To the extent applicable by law, in no case shall OHP, Inc. or the seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. OHP, Inc. and the Seller offer this product and the Buyer and user accept it, subject to the foregoing **Notice of Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of OHP, Inc.

Hormodin is a registered trademark of OHP, Inc.

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