

Hormodin[®] 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

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

CAUTION

Causes moderate eye injury. Harmful if inhaled or absorbed through the skin. Avoid contact with skin, eyes or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

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

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.

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 to 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.

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.

FIRST AID	
Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a control center or doctor, or going for treatment. You may also contact OHP, Inc. at 1-800-356-4647 for emergency medical treatment information.	
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15 - 20 minutes.
IF IN EYES:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15 - 20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
IF INHALED:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
IF SWALLOWED:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.

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, and chemical resistant or waterproof gloves.

Net Contents: 1 pound (454 grams)



INTRODUCTION

Cuttings from different varieties and species of plants, shrubs, and trees vary greatly in their capacity to form roots. Some are rooted with ease and others with difficulty, or not at all. It is assumed that natural root-forming hormones are present in different plants in varying quantities, and that the ease or difficulty with which a cutting can root is governed by the natural root-inducing hormones present.

The production of different strengths of **HORMODIN**, paralleling the range of hormones in nature, is a development of striking importance. Different strengths are recommended for different plants, as can be seen in the plant name chart on the following pages. Three strengths of powder are recommended for application to this 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

Cuttings of most deciduous shrubs probably root best when taken during June, July and August in the New York area. A few varieties can be taken the latter part of April, and others during May, depending upon when the new growth starts. Cuttings taken between August and December will vary considerably in their capacity to root, but a number of varieties will root well when taken at that time. Cuttings of certain plants are available over a much wider range of time in the South than in the North, and corresponding season advance must be considered. Cuttings of plants grown indoors are 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**. Cuttings which respond satisfactorily to **HORMODIN 1** would undoubtedly be injured by use of **HORMODIN 3**, and in some cases by **HORMODIN 2**.

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

Abbreviations: Species = sp. Varieties = vars.

* Standardized Plant Names.

Common Name*	Scientific Name	HORMODIN No.
Acanthopanax	<i>Acanthopanax</i> sp.	3
African Violet	<i>Saintpaulia</i> sp.	1
Ageratum	<i>Ageratum</i> sp.	1
Andromeda	<i>Andromeda japonica</i>	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 vars	<i>Azalea arborescens</i> (June-Aug.)	3
	<i>Azalea arborescens grandiflora</i>	3
	<i>Azalea calendulaceum</i>	3
	<i>Azalea canadense</i>	3
	<i>Azalea canescens</i>	3
	<i>Azalea</i> Christmas Cheer	1
	<i>Azalea colletianum</i>	3
	<i>Azalea</i> Coral Bell	1
	<i>Azalea dauricum</i> (June-July)	2
	<i>Azalea gandavense</i> (hybrids)	2
	<i>Azalea kosterianuma</i> Miss Louisa Hunnewell	3
	<i>Azalea kurume</i> vars. (June-July)	1
	<i>Azalea mollis</i>	2
	<i>Azalea mucronatum</i>	1
	<i>Azalea obtusa hinodigiri</i>	1
	<i>Azalea obtusa kaempferi</i>	1
	<i>Azalea</i> Pink Pearl	1
	<i>Azalea roseum</i>	3
	<i>Azalea schlippenbachii</i>	3
	<i>Azalea</i> Snow	1
	<i>Azalea vaseyi</i>	1
	<i>Azalea viscosum</i>	2
	<i>Azalea yedoense poukhanense</i>	1
Barberry	<i>Berberis</i> sp.	1
Bayberry	<i>Myrica</i> sp.	1
Beauty Berry	<i>Callicarpa</i> sp.	1
Beauty Bush	<i>Kikwitia 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-Kemp (Snake Plant)	<i>Sanserveria</i>	1
Boxwood	<i>Buxus</i> sp.	3
Broom	<i>Cystisus</i> sp.	1 or 2
Bush-Arbutus	<i>Abelia grandiflora rosea alba</i> (tips best)	1
Butterflybush	<i>Buddleia</i> sp.	1
Camelia	<i>Camellia</i> sp.	3
Candytuft	<i>Iberis</i> sp.	1

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Carnation	<i>Dianthus</i> vars.	1	<i>Juniperus squamata fargesii</i>		2
Catalpa	<i>Catalpa</i> sp.	3	<i>Juniperus virginiana</i> vars.		3
Chaste Tree	<i>Vitex</i> sp.	3	Kerria	<i>Kerria</i> sp.	1
Chestnut	<i>Castanea</i> sp.	2	Knotweed	<i>Polygonum</i> sp.	3
Chokeberry	<i>Aronia</i> sp.	2 or 3	Laburnocytisus	<i>Laburnocytisus</i> sp.	1 or 2
Chrysanthemum	<i>Chrysanthemum</i> vars.	1	Lantana	<i>Lantana</i> sp.	1
Cinquefoil	<i>Potentilla</i> sp.	2	Laurel	<i>Kalmia</i> sp.	3
Clematis	<i>Clematis</i> sp.	2	Lavender	<i>Lavandula</i> sp.	1
Clerodendron	<i>Clerodendron</i>	1	Leucothoe	<i>Leucothoe</i> sp.	2
Clockvine	<i>Thunbergia</i> sp.	1	Lilac (French-Hybrids)	<i>Syringa vulgaris</i> vars. (April 15-May 25)	3
Coleus	<i>Coleus blumei</i>	1	Lily Scales	<i>Lilium</i> (scales)	1 or 2
Cotoneaster	<i>Cotoneaster horizontalis</i>	3	Linden	<i>Tilia</i> sp.	1
Crabapple	<i>Malus</i> sp.	2 or 3	Locust	<i>Robinia</i> sp.	3
Crape Myrtle	<i>Lagerstroemia indica</i>	1	Magnolia	<i>Magnolia</i> sp.	2 or 3
Crassula	<i>Crassula rubicunda</i>	1	Maidenhair Tree	<i>Ginkgo biloba</i>	2
Creepervine	<i>Parthenocissus</i> sp.	1	Manzanita	<i>Arctostaphylos</i> sp.	3
Croton	<i>Codiaeum</i>	1	Maple (Japanese) vars.	<i>Acer japonicum palmatum</i> vars.	3
Cryptomeria	<i>Cryptomeria</i> sp.	3	Matrimony Vine	<i>Lycium halimifolium</i>	3
Currant	<i>Ribes tenuitorum</i>	1	Melastoma	<i>Melastoma</i>	1
Dahlia	<i>Dahlia</i> vars.	1	Mock Orange	<i>Philadelphus</i> sp.	1
Daphne	<i>Daphne</i> sp.	1 or 2	Mulberry	<i>Morus alba</i>	1
Deutzia	<i>Deutzia magnifica</i>	1	Ninepark	<i>Physocarpus</i> sp.	3
Dewberry	<i>Rubus</i> sp.	1	Oak	<i>Quercus</i> sp.	3
Dianthus (See Carnation)			Oleander	<i>Oleander nerium</i>	2
Dogwood	<i>Cornus florida</i> (July)	3	Olive	<i>Olea</i> sp.	3
Dovetree	<i>Davidia</i> sp.	1	Orange (sour)	<i>Citrus aurantium</i>	3
Douglas fir	<i>Pseudotsuga</i> sp.	3	Orixa	<i>Orixa</i> sp.	1
Dracena	<i>Dracena sardariana</i>	1	Osage Orange	<i>Maclura</i> sp.	1
Dutchmanspipe	<i>Aristolochia</i> sp.	1	Osmanthus	<i>Osmanthus</i> sp.	2
Elder	<i>Sambucus</i> sp.	1 or 2	Pachysandra	<i>Pachysandra terminalis</i>	2 or 3
Elm	<i>Ulmus</i> sp. (June-July)	1	Pea Shrub	<i>Caragana</i> sp.	1
Escallonia	<i>Escallonia</i> sp.	3	Pear (stock)	<i>Pyrus serotina</i>	1
Euonymus	<i>Euonymus</i> sp.	1	Pecan	<i>Pecan</i>	3
False arborvitae	<i>Thujaopsis</i> sp.	2	Penstemon	<i>Penstemon</i> sp.	1
Fir	<i>Abies</i> sp.	3	Periwinkle	<i>Vinca</i> sp.	2
Firethorn	<i>Pyracantha</i> sp.	1 or 2	Petunia	<i>Petunia</i> sp.	1
Flowering Cherry vars.	<i>Prunus</i> sp. and vars.	1	Philodendron	<i>Philodendron</i> sp.	1
Flowering quince	<i>Chaenomeles</i> sp.	3	Phlox	<i>Phlox</i> sp.	1
Fontanesia	<i>Fontanesia</i> sp.	1	Photinia	<i>Photinia</i> sp.	1
Forsythia	<i>Forsythia</i> sp. and vars.	1	Pine	<i>Pinus</i> sp.	2 or 3
Franklinia	<i>Gordonia alata</i>	2	Poinsettia	<i>Euphorbia</i> vars.	1
Fringe tree	<i>Chionanthus</i> sp.	2	Poplar	<i>Populus</i> sp.	1
Fuchsia	<i>Fuchsia</i>	1	Pricklypear Cactus	<i>Opuntia</i> sp.	1
Gardenia	<i>Gardenia florida</i>	1, 2 or 3	Privet	<i>Ligustrum avallifolium</i>	3
Geranium	<i>Geranium</i>	1	Raspberry	<i>Rubus</i> sp.	1
Germander	<i>Teucrium</i> sp.	2 or 3	Retinospora vars.	<i>Chamaecyparis obtusa</i> vars.	3
Golden Chain	<i>Laburnum</i>	2		<i>Chamaecyparis pfitzeriana</i>	3
Grape	<i>Vitis</i> sp. and vars.	3	Rhododendron vars.	<i>Rhododendron</i> (hybrids)	3
Hawthorne	<i>Crateagus</i> sp.	3		<i>Rhododendron catawbiense</i> (hybrids)	3
Hazelnut	<i>Corylus</i> sp. (June)	1 or 2		<i>Rhododendron wilsonii</i>	3
Heath	<i>Erica carnea</i> vars.	3	Rose	<i>Rosa</i> vars.	1
Heather	<i>Caluna vulgaris</i> vars.	3	Russian olive	<i>Elaeagnus</i> sp.	3
Hemlock vars.	<i>Tsuga</i> sp. and vars. (Sept.-June)	2 or 3	Sage	<i>Salvia</i> sp.	1
Hibiscus	<i>Hibiscus</i> (tropical)	2	Sequoia (Giant)	<i>Sequoia giantia</i>	2
Hibiscus (Rose of Sharon)	<i>Hibiscus syriacus</i> vars. (leafy and dormant)	3	Silverbell	<i>Halesia</i> sp.	2
Holly (American)	<i>Ilex opaca</i>	3	Snapdragon	<i>Antirrhinum</i> sp.	1
	<i>Ilex pernyi</i>	3	Snowbell	<i>Styrax</i> sp.	3
Holly (Chinese)	<i>Ilex cornuta</i>	3	Snowberry	<i>Symphoricarpos</i> sp.	1
Holly (English)	<i>Ilex aquifolium</i>	3	Sourwood	<i>Oxydendrum</i> sp.	3
Holly (Japanese)	<i>Ilex crenata</i> vars.	2	Speedwell	<i>Veronica</i> sp.	1
Honeysuckle	<i>Lonicera</i> sp.	1	Spirea	<i>Spirea</i> sp.	1
Hydrangea	<i>Hydrangea</i>	1	Springscent	<i>Fothergilla major</i>	2
Jasmine	<i>Jasminum nudiflorum</i>	1	Spruce (Blue)	<i>Picea pungens</i>	2
Jetbead	<i>Rhodotypos</i> sp.	1	Spruce (Norway) vars.	<i>Picea excelsa</i> vars. (Nov.-Feb.)	1
Juniper vars.	<i>Juniperus chinensis</i> vars.	3	Stevia	<i>Stevia</i> sp.	1
	<i>Juniperus chinensis japonica</i>	2	Stewartia	<i>Stewartia pentagyna</i>	1
	<i>Juniperus chinensis pfitzeriana</i>	2	St. Johnswort	<i>Hypericum</i> sp.	1
	<i>Juniperus columnis hillii</i> (dwarf)	2	Sweetleaf	<i>Symplocos</i>	1
	<i>Juniperus communis</i> vars.	3	Taxus (See Yew)		
	<i>Juniperus conferta</i>	3	Trifoliolate-Orange	<i>Poncirus</i> sp.	2
	<i>Juniperus rigida</i>	2	Tuliptree	<i>Liriodendron</i> sp.	3
	<i>Juniperus sabina fastigiata</i>	2			

Common Name*	Scientific Name	HORMODIN No.
Trumpet creeper	<i>Campsis</i> sp.	1
Umbrella Pine	<i>Sciadopitys verticillata</i>	3
Verbena	<i>Verbena</i> sp.	1
Viburnum	<i>Viburnum</i> sp.	1
Waxmyrtle	<i>Myrica</i> sp.	1
Weigelia	<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

LIMITED WARRANTY AND DISCLAIMER

NOTICE: 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. Buyer assumes all risks of use and handling which is a variance in any way with the directions herein. OHP, Inc., makes no other express or implied warranty of fitness or merchantability. 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 Seller offer this product and the Buyer and user accept it, subject to the foregoing Limited Warranty and Disclaimer 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.

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.

CONTAINER DISPOSAL (metal/plastic container): Triple rinse (or equivalent). Then offer for recycling, or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

CONTAINER DISPOSAL (fiber drums with liners): Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.

Manufactured for:

OHP, Inc.

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