



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

August 27, 2024

Oscar Perez Ovilla, Ph.D.
Regulatory Affairs Manager
AMVAC Chemical Corporation
4695 MacArthur Court, Suite 1200
Newport Beach, CA 92660

Subject: PRIA Label Amendment – Acceptable Review of Storage Stability/Corrosion
Characteristics Data for Proposed Closed Loading Systems, Approval of New
Alternate Brand Names and Incorporation of Other Minor Label Revisions
Product Name: THIMET® 20-G
EPA Registration Number: 5481-530
Application Date: November 9, 2023
Case Number: 494275

Dear Oscar Perez Ovilla:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ

from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Carmen Rodia via e-mail at Rodia.Carmen@epa.gov.

Sincerely,

A handwritten signature in dark ink that reads "Tamica Cain". The signature is fluid and cursive.

Tamica L. Cain, Product Manager 10
Invertebrate-Vertebrate Branch 2
Registration Division (7505T)

Enclosures: *Stamped "Accepted" Master Label, August 27, 2024*
 Product Chemistry Review, dated August 7, 2024

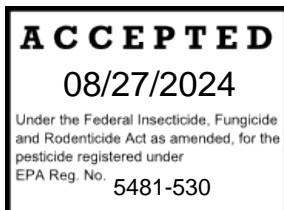
RESTRICTED USE PESTICIDE**Due to acute oral, dermal, and inhalation toxicity and avian hazards**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

[Note to reviewer: Text in braces { } is for informational purposes and will not appear on the end-use label.]

[Note to reviewer: Text in brackets [] is optional, and may or may not appear on the end-use label.]

[Text in parentheses () will appear on the end-use label.]

**PHORATE GROUP 1B INSECTICIDE****THIMET® 20-G****[ALTERNATE BRAND NAMES:** THIMET® 20-G SOIL AND SYSTEMIC INSECTICIDE, THIMET® 20-G SMARTBOX®, THIMET® 20-G SMARTCARTRIDGE®, THIMET® LOCK'N LOAD®**]**Alternate Wording when packaged in LOCK'N LOAD: **[LOCK'N LOAD® CLOSED LOADING SYSTEM]**Alternate Wording when packaged in SMARTBOX: **[SMARTBOX® CLOSED LOADING SYSTEM]**Alternate Wording when packaged in SMARTCARTRIDGE: **[SMARTCARTRIDGE® CLOSED LOADING SYSTEM]****ACTIVE INGREDIENT:****By Weight**

Phorate: 0,0-diethyl S-[(ethylthio) methyl] phosphorodithioate20.0%

OTHER INGREDIENTS**80.0%****TOTAL****100.0%****KEEP OUT OF REACH OF CHILDREN**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID	
Contains an organophosphate that inhibits cholinesterase.	
If swallowed:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have a 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.
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.• Call a poison control center or doctor for further treatment advice.
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.• Call a poison control center or doctor for further treatment advice.
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.• Call a poison control center or doctor for treatment advice.
EMERGENCY INFORMATION	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY:	
For Medical Emergencies phone:.....1-888-681-4261	
For Transportation Emergencies, including spill, leak or fire, phone: CHEMTREC®1-800-424-9300	
For Product Use Information phone: AMVAC®1-888-462-6822	

NOTE TO PHYSICIAN

Warning symptoms include weakness, headache, tightness in chest, blurred vision, nonreactive pinpoint pupils, salivation, nausea, vomiting, diarrhea, and abdominal cramps. TREATMENT: Atropine is the specific therapeutic antagonist of choice against parasympathetic nervous stimulation. If there are signs of parasympathetic stimulation, atropine sulfate should be injected intramuscularly or intravenously at 10-minute intervals in doses of 2 to 4 milligrams until complete atropinization has occurred as shown by dilated pupils, dry flushed skin and tachycardia. Twenty to thirty milligrams, or more, may be required during the first 24 hours. Never give opiates or phenothiazine tranquilizers. Clear chest by postural drainage. Artificial respiration or oxygen administration may be necessary. Observe patient continuously for at least 48 hours. Allow no further exposure to any cholinesterase inhibitor until cholinesterase regeneration has taken place as determined by blood tests. Probable mucosal damage may contraindicate the use of gastric lavage. Pralidoxime chloride (2-PAM; PROTOPAM chloride) may be effective as an adjunct to atropine. Use according to label directions.

SEE [INSIDE] [SIDE] [BACK PANEL] [BOOKLET] [ATTACHED] [TO] [POUCH] [BAG] [SEALED PACK] FOR [COMPLETE] [ADDITIONAL] [PRECAUTIONARY STATEMENTS,] [DIRECTIONS FOR USE,] [STORAGE AND DISPOSAL.] AND [LIMITED WARRANTY AND DISCLAIMER].

EPA Reg. No.: 5481-530

EPA Est. No. _____

Net Contents: _____ As Marked on Container



AMVAC Chemical Corporation
4695 MacArthur Court, Suite 1200
Newport Beach, CA 92660
1-888-462-6822

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: Fatal if swallowed, inhaled or absorbed through skin. Corrosive. Causes irreversible eye damage. **DO NOT** breathe dust. **DO NOT** get in eyes, on skin, or on clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

WORK SAFETY RULE

REPEATED EXPOSURES TO CHOLINESTERASE INHIBITORS SUCH AS ARE CONTAINED IN THIS PRODUCT MAY, WITHOUT WARNING, CAUSE PROLONGED SUSCEPTIBILITY TO VERY SMALL DOSES OF ANY CHOLINESTERASE INHIBITOR.

Persons working with this product should have frequent blood tests of their cholinesterase levels. If the cholinesterase level falls below a critical point, no further exposure should be allowed until it has been determined by means of blood tests that the cholinesterase level has returned to normal. Before using this product consult the National Pesticide Information Center for recommendations regarding such blood tests, poisoning management, emergency treatment, and other information regarding the toxicity of phorate. The toll-free number for the National Pesticide Information Center is 1-800-858-7378.

If handled indoors provide mechanical exhaust ventilation. Keep all unprotected persons, children, livestock, and pets away from treated areas or where there is danger of drift.

DO NOT rub eyes or mouth with hands. If you feel sick in any way, STOP work and get help right away, See "FIRST AID" section.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators, loaders and other handlers must wear:

- Long sleeved shirt and long pants; and
- Shoes plus socks

In addition, loaders must also wear:

- Chemical-resistant gloves made of any waterproof material.

See Engineering Controls for additional requirements.

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. Wash all PPE after each day's use.

DO NOT reuse contaminated clothing. Clothing and protection equipment heavily contaminated must be destroyed according to state and local regulations. HEAVILY CONTAMINATED CLOTHING CANNOT BE ADEQUATELY DECONTAMINATED.

IMPORTANT: In addition to wearing the required PPE specified above, all other handlers performing tasks such as in the case of a broken container, spill clean-up, equipment failure, equipment maintenance (cleaning and repair), for which Engineering Controls are not feasible, must wear:

- Coveralls over long sleeved shirt and long pants;
- Chemical-resistant footwear plus socks;
- Chemical-resistant gloves made of waterproof material;
- Protective eyewear;
- Chemical-resistant apron; and
- A NIOSH-approved particulate respirator with any N², R or P filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with HE filter with NIOSH approval number prefix TC-21C.

USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

DO NOT reuse contaminated clothing. Clothing and protection equipment heavily contaminated must be destroyed according to state and local regulations. HEAVILY CONTAMINATED CLOTHING CANNOT BE ADEQUATELY DECONTAMINATED.

USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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.

Failure to follow precautions including wearing proper Personal Protective Equipment may result in serious or even life threatening poisoning requiring immediate medical attention. The active ingredient in this granular formulation can be absorbed through skin to cause poisoning.

ENGINEERING CONTROLS

THIMET 20-G is formulated into the [LOCK'N LOAD] [SMARTBOX] [SMARTCARTRIDGE] system, which when used correctly, qualifies as a closed loading system meeting the requirements listed in the Worker Protection Standard for Agricultural Pesticides (40 CFR 170.240(d)(4-6)). While applying **THIMET 20-G** using the [LOCK'N LOAD] [SMARTBOX] [SMARTCARTRIDGE] closed loading system, applicators and handlers must either:

- Use a vehicle equipped with an enclosed cab providing respiratory protection equivalent to a dust/mist filtering respirator; or
- Wear a NIOSH-approved dust/mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N², R, P, or HE filter.

In addition, applicators and handlers using the [LOCK'N LOAD] [SMARTBOX] [SMARTCARTRIDGE] closed loading system along with a vehicle equipped with an enclosed cab must also be provided and have immediately available for use in case they must exit the enclosed cab within in the treated area:

- Coveralls;

- Chemical-resistant gloves made of any waterproof material; and
- Chemical-resistant footwear.

Prior to reentering the enclosed cab, applicators and handlers must:

- Take off any PPE that was worn in the treatment area; and
- Store all such PPE in a chemical-resistant container, such as a plastic bag, to prevent contamination of the inside of the enclosed cab.

ENVIRONMENTAL HAZARDS

This pesticide is very highly toxic to fish and wildlife. **DO NOT** apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Runoff may be hazardous to aquatic organisms in neighboring areas. **DO NOT** contaminate water when disposing of equipment wastewater or rinsate. Birds and mammals may be killed if granules are not properly covered with soil in all areas of the treated field and in loading areas.

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

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

USE RESTRICTIONS

- This label must be in possession of the user at the time of pesticide application.
- **DO NOT** apply **THIMET 20-G** 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.
- **THIMET 20-G** is **NOT** for use or storage in or around the home.
- **DO NOT** store **THIMET 20-G** in the same area with food or feed.
- Aerial application of **THIMET 20-G** is strictly prohibited.
- **DO NOT** use **THIMET 20-G** on any crop on Long Island, New York.
- **DO NOT** apply more than one application of **THIMET 20-G** per crop per calendar year.
- Application of **THIMET 20-G** on peanuts at pegging is strictly prohibited.
- Cotton side-dress use is restricted to only the states of Arizona and California.
- Application of **THIMET 20-G** must be thoroughly incorporated into the soil.
- **DO NOT** apply **THIMET 20-G** to saturated soils. In addition, **DO NOT** apply **THIMET 20-G** in wet soil conditions that may prevent the equipment from covering pesticide granules.
- **DO NOT** apply **THIMET 20-G** when forecasted precipitation event favors runoff from treated area. In addition, **DO NOT** apply **THIMET 20-G** while precipitation is occurring or while conditions favor runoff from the treated area.
- For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Under some conditions, phorate may have a high potential for runoff into surface water for several days following application. Use Best Management Practices (BMPs) for minimizing surface runoff.

DO NOT apply **THIMET 20-G** in the following areas:

- Frequently flooded areas
- Areas where intense or sustained rainfall is forecast to occur within 48 hours
- Poorly draining or wet soils with readily visible slopes toward adjacent surface water
- Areas over-laying extremely shallow ground water
- Areas with in-field canals or ditches that drain to surface water
- Areas not separated from adjacent surface waters with vegetated filter strips
- Areas over-laying tile drainage systems that drain to surface water

When used on erodible soils, BMPs for minimizing runoff should be followed. Consult your local soil conservation service for recommendations in your use area.

In particular, where highly erodible land (HEL) is adjacent to aquatic bodies, a 66-foot buffer/setback area should be left in grass or other natural vegetation.

- **DO NOT** apply within 50 feet of any drinking water well to minimize potential contamination.
- **DO NOT** wash, load, or empty application equipment near any well, as this practice is a potential source of ground water contamination.

Some additional BMPs to control runoff from agricultural fields to surface waters include:

- Riparian and grass buffers
- Grass waterways
- Conservation tillage
- Contour farming/buffers
- Terrace
- Cover crops/conservation cover
- Irrigation Water Management systems

Refer to your local State agency responsible for pesticide registrations for additional information and local recommendations.

Please refer to the operator's manual for detailed information on system operation and calibration procedures for systems capable of using the [LOCK'N LOAD] [SMARTBOX] [SMARTCARTRIDGE].

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 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), notification to workers, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of **48** hours. Each 48-hour REI is increased to 72 hours in outdoor areas where average annual rainfall is less than 25 inches a year.

EXCEPTION: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated areas without restriction if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over long-sleeved shirt and long pants;
- Chemical-resistant gloves, such as those made of waterproof material;
- Chemical-resistant footwear plus socks; and
- Protective eyewear

Notify workers of application by warning them orally and by posting warning signs at entrances to treated areas.

BEFORE USING, READ PRECAUTIONARY STATEMENT

Apply **THIMET 20-G** with a granular pesticide applicator properly calibrated to assure accurate placement and proper dosage. Cover granules that may be exposed on the ends of the treated rows and turns and loading areas by deep discing immediately after treating fields. **Make sure the hoppers are emptied while still in the field.**

In the event of a crop failure, any crop on the **THIMET 20-G** label can be replanted immediately. All other crops must not be planted in treated fields for 9 months after application.

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, **THIMET 20-G** contains the active ingredient phorate which is a **Group 1** insecticide. Insecticides with the same group number affect the same biological site of action on the target pest and when used repeatedly in the same treatment area, naturally-occurring resistant individuals may survive correctly applied insecticide treatments, reproduce, and become dominant.

To delay the development of insecticide resistance, a resistance-management strategy should include incorporation of cultural and biological control practices, alternation to different mode of action insecticides on succeeding generations, targeting the most susceptible life stage, and where possible controlling multiple life stages of the same pest.

Unless directed otherwise in the specific crop/pest sections of this label, follow these guidelines to delay the development of insecticide resistance:

- Apply **THIMET 20-G** and other **Group 1** insecticides within a single "treatment widow" to minimize exposing successive

generations of a pest species to the same mode of action insecticides.

- A “treatment window” is defined as the period of residual insecticidal activity provided by one or more applications of products with the same mode of action not to exceed approximately 30 days.
- Within the **Group 1** “treatment window”, make no more than 2 applications **THIMET 20-G** or other **Group 1** insecticides.
- Following a **Group 1** “treatment window”, rotate to a “treatment window” of effective insecticides with a different mode of Action Group Number. The period between **Group 1** “treatment windows” should be at least 30 days.
- For short cycle crops (< 50 days), the duration of the crop cycle may be considered as **Group 1** “treatment window” if no **Group 1** insecticides are used during the next crop cycle at the same farm location.
- Use labeled rates of **THIMET 20-G** when applied alone, or apply an herbicide after BANDED applications of **THIMET 20-G**.

Adopt an integrated pest management program for insecticide use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices. Monitor after application for unexpected target pest survival. If resistance to **THIMET 20-G** is suspected, consult with AMVAC Chemical Corporation’s representative, local university specialist, or certified pest control advisor.

Consult with your local or state agricultural authorities or product manufacturer or visit the Insecticide Resistance Action Committee (IRAC) on the web at <http://www.irac-online.org> for more information about developing a resistance management strategy.

For further information or to report suspected resistance contact AMVAC Chemical Corporation at 1-888-462-6822.

CROPS	PESTS CONTROLLED	RATE OF THIMET 20-G	APPLICATION	USE DIRECTIONS
BEANS At Planting	Mexican bean beetles	4.9-9.4 oz per 1,000 ft of row for any row spacing (30-inch minimum) or no more than 10.2 lb/A	Drill granules to the side of the seed. Granules must be incorporated into the soil.	Use the high rate under heavy pest pressure. <u>Use Restrictions:</u> <ul style="list-style-type: none"> • DO NOT place THIMET 20-G granules in direct contact with seed. • DO NOT graze or feed treated hay or forage to livestock. • DO NOT apply later than 60 days before harvest. • DO NOT apply more than one application of THIMET 20-G per calendar year.
	Leafhoppers Aphids Lygus bugs Thrips Mites [Seedcorn maggots]	4.5-7.0 oz per 1,000 ft of row for any row spacing (30-inch minimum) or no more than 7.6 lb/A		
	Seedcorn maggots		Apply granules in a band over the row and lightly incorporate into the soil using tines or a light drag chain. Granules must be incorporated into the soil.	
FIELD CORN AND SWEET CORN (excluding popcorn) At Planting	Corn rootworms Wireworms White grubs Seedcorn maggots Seedcorn beetles Flea beetles Mites	4.5-6.0 oz per 1,000 ft of row for any row spacing (30-inch minimum) or no more than 6.5 lb/A	Place granules in a 7-inch band over the row directly behind the planter shoe in front of or behind the press wheel and lightly incorporate. Granules must be incorporated into the soil.	Use the high rate under heavy pest pressure. For field corn: Accent® herbicide and Beacon® herbicide may be applied after BANDED applications of THIMET 20-G . Refer to the Accent and Beacon labels for pertinent use directions and precautions.

CROPS	PESTS CONTROLLED	RATE OF THIMET 20-G	APPLICATION	USE DIRECTIONS
				<p>Use Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than one application of THIMET 20-G per crop per calendar year. • DO NOT use in furrow application.
<p>FIELD CORN AND SWEET CORN (excluding popcorn)</p> <p>At Cultivation</p>	Corn rootworms		<p>Apply granules to base of plants just ahead of cultivation shovels so as to cover granules with soil.</p> <p>Granules must be incorporated into the soil.</p>	<p>Use Restrictions:</p> <ul style="list-style-type: none"> • DO NOT harvest, graze, or cut forage within 30 days of last treatment. • DO NOT apply more than one application of THIMET 20-G per crop per calendar year.
<p>FIELD CORN (excluding sweet corn and popcorn)</p> <p>At Cultivation</p>	Chinch bug nymphs (Arkansas, Colorado, Kansas, Louisiana, Mississippi, Nebraska, Oklahoma, Tennessee, Texas)		<p>Apply granules to base of plants just ahead of cultivation shovels so as to cover granules with soil.</p> <p>Apply as soon as chinch bug nymphs are observed at base of plant. Granules must be placed at the infested region of the plants and adequately covered with soil.</p> <p>Granules must be incorporated into the soil.</p>	<p>Later infestations of chinch bugs may not be controlled.</p> <p>Use the high rate under heavy pest pressure.</p> <p>Use Restrictions:</p> <ul style="list-style-type: none"> • DO NOT harvest, graze, or cut forage within 30 days of last treatment. • DO NOT apply more than one application of THIMET 20-G per crop per calendar year.
<p>COTTON</p> <p>At Planting</p>	Early season control of: Thrips Leafminers	2.5-3.0 oz per 1,000 ft of row for any spacing (30-inch minimum) or no more than 3.3 lb/A	<p>Distribute the granules evenly in the furrow at planting time. Soil temperature, moisture and tilth should be favorable for good germination and emergence.</p> <p>Granules must be incorporated into the soil.</p>	<p>Suggested for areas where limited period of protection against early season pests is necessary for good cotton growth.</p> <p>If seeds and THIMET 20-G are hill- dropped, THIMET 20-G rates may be reduced by one-half (to 1.6 lb THIMET 20-G per acre).</p> <p>Crop injury may occur if applications of diuron-containing herbicides such as Karmex® herbicide or Direx® herbicide are made in conjunction with soil- applied organophosphate pesticides.</p>

CROPS	PESTS CONTROLLED	RATE OF THIMET 20-G	APPLICATION	USE DIRECTIONS
				<p>Use the high rate under heavy pest pressure</p> <p>Use Restrictions:</p> <ul style="list-style-type: none"> • DO NOT graze or feed treated hay or forage to livestock. • DO NOT apply more than one application of THIMET 20-G per calendar year.
COTTON At Planting	Mites Thrips Aphids Black cutworms Leafhoppers Whiteflies Leafminers	6.0-9.0 oz per 1,000 ft of row for any row spacing (36-inch minimum) or no more than 8.2 lb/A 6.0-7.5 oz per 1,000 ft of row for 30-inch row spacing or no more than 8.2 lb/A	Distribute the granules evenly in the furrow at planting time. Soil temperature, moisture and tilth should be favorable for good germination and emergence. Under adverse conditions plant stand may be affected. Granules must be incorporated into the soil.	<p>Recommended for areas requiring an extended period of mite control as well as early season protection against other cotton pests. The higher rate is suggested for heavier soils.</p> <p>Crop injury may occur if applications of diuron-containing herbicides such as Karmex and Direx are made in conjunction with soil-applied organophosphate pesticides.</p> <p>Use the high rate under heavy pest pressure.</p> <p>Use Restrictions:</p> <ul style="list-style-type: none"> • DO NOT graze or feed treated hay or forage to livestock. • DO NOT apply more than one application of THIMET 20-G per calendar year.
COTTON Side-Dressing (Irrigated Cotton in Arizona and California Only)	Mites from spring to early summer	9.0-12.0 oz per 1,000 ft of row for any row spacing (36-inch minimum) or no more than 10.9 lb/A 7.5-10.0 oz per 1,000 ft of row for 30-inch row spacing or no more than 10.9 lb/A	Incorporate granules into the soil as a side- dress application deep enough to avoid disturbance by future cultivations. Granules must be incorporated into the soil.	<p>Irrigate as soon as possible after treatment.</p> <p>Crop injury may occur if applications of diuron-containing herbicides such as Karmex herbicide or Direx herbicide are made in conjunction with soil- applied organophosphate pesticides. Use the high rate under heavy pest pressure.</p> <p>Use Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than one application of THIMET 20-G per calendar year. • DO NOT apply later than 60 days before harvest.

CROPS	PESTS CONTROLLED	RATE OF THIMET 20-G	APPLICATION	USE DIRECTIONS
				<ul style="list-style-type: none"> DO NOT graze or feed treated hay or forage to livestock.
PEANUTS At Planting	Thrips Leafhoppers	5.5 oz per 1,000 ft of row for any row spacing (24-inch minimum) or no more than 7.5 lb/A	Distribute the granules evenly in the furrow at planting time. For best results, plant peanuts when soil temperatures are favorable for establishing good peanut stands. Granules must be incorporated into the soil.	<u>Use Restrictions:</u> <ul style="list-style-type: none"> DO NOT apply within 90 days of harvest. DO NOT apply more than one application of THIMET 20-G per calendar year. DO NOT graze or feed treated hay or forage to livestock. Use on peanuts at pegging is prohibited.
POTATOES At Planting	Aphids Leafhoppers Leafminers Psyllids Wireworms Flea beetle larvae and reduction of flea beetle adults	Light or Sandy Soils: 8.5-11.3 oz per 1,000 ft of row for any row spacing (32-inch minimum) or no more than 11.5 lb/A Heavy or Clay Soils: 13.0-17.3 oz per 1,000 ft of row for any row spacing (32-inch minimum) or no more than 17.7 lb/A	Distribute the granules evenly in the furrow or band on each side of the row and incorporate. Granules must be incorporated into the soil.	Use the high rate under heavy pest pressure. <u>Use Restrictions:</u> <ul style="list-style-type: none"> DO NOT apply within 90 days of harvest. DO NOT apply more than one application of THIMET 20-G per calendar year.
	Colorado potato beetle (early season control)	Heavy or Clay Soils: 13.0-17.3 oz per 1,000 ft of row for any row spacing (32-inch minimum) or no more than 17.7 lb/A		Use the high rate under heavy pest pressure. <u>Use Restrictions:</u> <ul style="list-style-type: none"> DO NOT apply within 90 days of harvest. DO NOT use for Colorado potato beetle control on the Delmarva Peninsula. DO NOT apply more than one application of THIMET 20-G per calendar year.
POTATOES Post-emergence	Aphids Leafhoppers Colorado potato beetle (early season only) Wireworms (suppression only)	Light or Sandy Soils: 8.5 – 11.3 oz per 1,000 ft of row for any row spacing (32-inch minimum) DO NOT use on heavy soils.	For postemergence treatment: Place granules on each side of the row at the level of the seed pieces before covering at hilling. Apply 4 to 6 weeks after planting. Granules must be incorporated into the	Use the high rate under heavy pest pressure. <u>Use Restrictions:</u> <ul style="list-style-type: none"> DO NOT apply within 90 days of harvest. DO NOT use for Colorado potato beetle control on the Delmarva Peninsula. DO NOT apply more than one application of THIMET 20-G per calendar year.

CROPS	PESTS CONTROLLED	RATE OF THIMET 20-G	APPLICATION	USE DIRECTIONS
			soil.	
SORGHUM At Planting	Greenbugs	4.5 – 6.0 oz per 1,000 ft of row for any row spacing (30-inch minimum) or no more than 6.5 lb/A.	Place granules in a 7- inch band over the row directly behind the planter shoe in front of or behind the press wheel and lightly incorporate. OR Drill 1 inch below and 2 inches to the side of the seed.	Use the high rate under heavy pest pressure. Use Restrictions: <ul style="list-style-type: none"> • DO NOT place THIMET 20-G granules in direct contact with seed. • DO NOT apply more than one application of THIMET 20-G per calendar year.
SORGHUM At Cultivation	Chinch bug nymphs (Colorado, Kansas, Nebraska)		Apply granules to base of plants just ahead of cultivation shovels so as to cover granules with soil. Apply as soon as chinch bug nymphs are observed at base of plants. Granules must be placed at the infested region of the plants and adequately covered with soil. Granules must be incorporated into the soil.	Later infestation of chinch bugs may not be controlled. Use the high rate under heavy pest pressure. Use Restrictions: <ul style="list-style-type: none"> • DO NOT feed foliage before grain harvest. • DO NOT apply within 30 days of harvest. • DO NOT graze within 30 days after application. • DO NOT apply more than one application of THIMET 20-G per calendar year.
SOYBEANS At Planting	For early season control of: Mexican bean beetles Leaf Hoppers Lygus bugs [Seedcorn maggots] Thrips Aphids Mites	9.0 oz per 1,000 ft of row for any row spacing (30-inch minimum) or no more than 9.8 lb/A	Drill granules to the side of the seed. Granules must be incorporated into the soil.	Crop injury may result when preplant incorporated or preemergence applications of metribuzin herbicides are used in conjunction with THIMET 20-G or other soil-applied organophosphate pesticides. Use Restrictions: <ul style="list-style-type: none"> • DO NOT place THIMET 20-G granules in direct contact with seed. • DO NOT feed the foliage of treated soybeans. • DO NOT apply more than one application of THIMET 20-G per calendar year.
	Seedcorn maggots		Place granules in a 7- inch band over the row directly behind the planter shoe and in front of the press wheel and lightly incorporate. Granules must be incorporated into the soil.	
SUGAR BEETS	Aphids Beet root maggots	3.4 – 4.5 oz per 1,000 ft of row for any row	Drill granules to side of the seed OR place	Use the high rate under heavy pest pressure.

CROPS	PESTS CONTROLLED	RATE OF THIMET 20-G	APPLICATION	USE DIRECTIONS
At Planting	Leafhoppers Mites Leafminers	spacing (20-inch minimum) or no more than 7.4 lb/A	granules in a band over the seed and lightly incorporate. Granules must be incorporated into the soil.	Use Restrictions: <ul style="list-style-type: none"> • DO NOT place THIMET 20-G granules in direct contact with the seed. • DO NOT apply within 30 days of harvest. • DO NOT apply more than one application of THIMET 20-G per calendar year.
SUGAR BEETS Post-emergence	Mites Aphids Beet root maggots	4.9 – 7.5 lb per acre	Direct granules over the row towards the base of the plants. Lightly incorporate granules into the soil using tines, shovels, or a rotary hoe. Apply post-emergence when plants are dry. Granules must be incorporated into the soil.	Use the high rate under heavy pest pressure. Consult your state experiment station or state extension service for proper timing of application in your area. Use Restrictions: <ul style="list-style-type: none"> • DO NOT apply within 30 days of harvest. • DO NOT apply more than one application of THIMET 20-G per calendar year. • The feeding of sugar beet tops or silage to dairy cattle is prohibited.
SUGAR CANE (Florida)	Wireworms	14.6 – 19.5 lb per acre	Apply in a 10-12 inch band directly on the seed piece and surrounding soil in the open furrow immediately before covering with soil. Granules must be incorporated into the soil.	Use the high rate under heavy pest pressure. Use Restrictions: <ul style="list-style-type: none"> • DO NOT graze or feed treated hay or forage to livestock. • DO NOT apply more than one application of THIMET 20-G per calendar year.

USE RATES AS POUNDS PER ACRE

APPLICATION RATE (ounces per 1,000 ft of row)															
	1.2	3.0	4.5	4.9	5.5	6.0	7.0	7.5	9.0	9.4	10.0	11.0	11.3	12.0	17.3
40"		2.5	3.7	4.0	4.5	4.9	5.7	6.1	7.4	7.7	8.2	9.0	9.2	9.8	14.1
38"		2.6	3.9	4.2	4.7	5.2	6.0	6.4	7.7	8.1	8.6	9.5	9.7	10.3	14.9
36"		2.7	4.1	4.4	5.0	5.4	6.4	6.8	8.2	8.5	9.1	10.0	10.3	10.9	15.7
34"		2.9	4.3	4.7	5.3	5.8	6.7	7.2	8.6	9.0	9.6	10.6	10.9	11.5	16.6
32"		3.1	4.6	5.0	5.6	6.1	7.1	7.7	9.2	9.6	10.2	11.2	11.5	12.3	17.7
30"		3.3	4.9	5.3	6.0	6.5	7.6	8.2	9.8	10.2	10.9	12.0	12.3	13.1	
26"		3.8	5.7	6.2	6.9	7.5	8.8	9.4	11.3	11.8	12.6	13.8	14.2		
24"		4.1	6.1	6.7	7.5	8.2	9.5	10.2	12.3	12.8	13.6	15.0			
22"		4.5	6.7	7.3											
20"	2.0	4.9	7.4												
16"	2.5														
12"	3.3														
8"	4.9														

To determine other use rates, in pounds per acre:

Take desired rate (ounces) and divide by 1,000 ft of row, divide by 16 oz/lb, divide by row width in feet, multiply by 43,560 ft²/A = lb/A.

Example: For 10 oz in 1,000 ft of row, 36 inch row width (3 ft):

$$(10 \text{ oz})(43,560 \text{ ft}^2/\text{A}) \div (1,000 \text{ ft row})(16 \text{ oz/lb})(3 \text{ ft row width}) = 9.075 \text{ lb/A}$$

CALIBRATION INFORMATION

It is important that applicator equipment be properly set to deliver the labeled rate. The table below contains suggested starting gauge settings for calibration at planting speeds of 5 or 7 mph and application rates of 4.5, 6.0 or 9.0 oz per 1,000 ft of row.

NOTE: The settings in this table SHOULD ONLY BE USED AS STARTING POINTS. Continually check the amount of **Thimet 20-G** used against a known length of row and make further adjustments accordingly. Also check calibration occasionally to make sure equipment wear, changing moisture conditions, etc. have not caused a change in flow rate.

{Alternate Wording when packaged in SMARTBOX}

Please refer to the SmartBox operator's manual for detailed information on system operation and calibration procedures for systems capable of using the SMARTBOX container.

{Alternate Wording when packaged in SMARTCARTRIDGE}

Please refer to the operator's manual for detailed information on system operation and calibration procedures for systems capable of using the SMARTCARTRIDGE container.

{Note: this table will not be used with SmartCartridge use directions}

SUGGESTED GRANULAR APPLICATOR SETTING¹

Applicator	Planter Speed 5 mph			Planter Speed 7 mph		
	4.5 oz.	6.0 oz.	9.0 oz.	4.5 oz.	6.0 oz.	9.0 oz.
John Deere® Max-Emerge® 2	14	17	23	17	21	33
John Deere Max-Emerge 2 with Chemizer Rotors	15	18	26	19	24	36
John Deere Max-Emerge (Odd Notches 5-15-25-35)	9	11	14	11	13	17
John Deere Max-Emerge (Even Notches 0-10-20-30)	9	13	20	13	19	26
John Deere 71 Flexi-Planter (John Deere Metal Hoppers)	1/23	1/26	2/3	1/26	1/32	2/14
New International Harvester™ (2 gauges hopper)	1/9	2/2	2/6	2/2	2/5	3/3
Old International Harvester (1 gauge hopper)	1/6	1/8	2/3	1/9	2/2	2/9
New Gandy®	15	18	22	18	21	25
New Noble™	6	8	11	8	11	14
Old Noble	8	11	16	12	15	22

Applicator	Planter Speed 5 mph			Planter Speed 7 mph		
	4.5 oz.	6.0 oz.	9.0 oz.	4.5 oz.	6.0 oz.	9.0 oz.
Allis Chalmers™ (78 and 79 Series)	4	5	7	4	5	7
Allis Chalmers #385	10	11	14	11	13	18
White™ 6000	9	12	16	12	16	19
Kinze® (even 0-10-20-30)	6	9	13	9	12	17

¹Suggested Starting point only.

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Keep this product in its tightly closed original container. Store in a secure, cool, dry (preferably locked) area that is inaccessible to children and animals. **DO NOT** use or store **THIMET 20-G** in or around the home. **DO NOT** store in the same area with food or feed. **DO NOT** store opened containers. Once a container has been opened, use it completely. **DO NOT** contaminate water, other pesticides, fertilizer, food or feed products by storage or disposal.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. 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. Once a container has been opened, use it completely. Make sure the hoppers are emptied while still in the field. Open dumping is prohibited. Cover or incorporate spills.

CONTAINER HANDLING:

{Alternate Wording when packaged in LOCK 'N LOAD}

DO NOT DISCARD THE CONTAINER. **DO NOT** attempt to open or tamper with the container. Completely empty container into application equipment. Return empty container to point of purchase or call 1-888-GO-AMVAC for instructions. Refillable container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose.

{Alternate Wording when packaged in SMARTBOX}

DO NOT DISCARD THE CONTAINER. **DO NOT** attempt to open or tamper with the container. Completely empty container into application equipment. All SMARTBOX containers must be returned per instructions provided or by calling 1-888-SMARTBOX. Refillable container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose.

{Alternate Wording when packaged in SMARTCARTRIDGE}

DO NOT DISCARD THE CONTAINER. **DO NOT** attempt to open or tamper with the container. All containers must be returned to the retailer that the product was purchased from. Refillable container. Refill this container with insecticide only. **DO NOT** reuse the container for any other purpose.

LIMITED WARRANTY AND DISCLAIMER

The Manufacturer warrants (a) that this product conforms to the specifications on this label; and (b) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluations of reasonable tests for effectiveness, of toxicity to laboratory animals and to plants and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties of food crops and plants, or in all states or under all conditions. THIS WARRANTY DOES NOT EXTEND TO THE USE OF THIS PRODUCT CONTRARY TO LABEL INSTRUCTIONS, OR UNDER CONDITIONS NOT REASONABLY FORESEEABLE. Product storage, use and growing conditions are beyond Manufacturer's control.

THERE ARE NO WARRANTIES EXPRESS OR IMPLIED, OTHER THAN THOSE WARRANTED BY THIS LABEL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE, TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF QUALITY OR PERFORMANCE. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS OR CAUTIONS.

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