

Perm-X™ UL 30-30

For use only by federal, state, tribal or local government officials responsible for public health or vector control, or by persons certified in the appropriate category or otherwise authorized by the state or tribal lead pesticide regulatory agency to perform adult mosquito control applications, or by persons under their direct supervision.

CONTROLS: Adult Mosquitoes, Biting and Non-biting Midges, Black Flies and other outdoor flying insects as listed on this label.

FOR USE AS A: ULV thermal or non-thermal aerosol using ground or aerial equipment in areas including: residential, recreational areas, parks, campsites, woodlands, athletic fields, golf courses, municipalities, playgrounds, and non-crop waste areas and over listed growing crops and range grasses prior to harvest for the control of adult mosquitoes and biting flies within or adjacent to these areas. Refer to label for additional use sites.

SPECIMEN LABEL

ACTIVE INGREDIENTS:

Permethrin 30%

Piperonyl Butoxide 30%

OTHER INGREDIENTS* 40%

TOTAL: 100%

*(butyl carbityl)(6-propylpiperonyl) ether and related compounds.

**Contains Petroleum Distillate

Contains 2.51 lbs a.i. Permethrin/gallon and 2.51 lbs a.i. Piperonyl Butoxide/gallon

KEEP OUT OF REACH OF CHILDREN CAUTION

PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta haya sido explicado ampliamente.
(TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

See inside label booklet for additional Precautionary Statements.

EPA Reg.No. 89459-44
EPA Est. No. 2724-TX-1

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Causes moderate eye irritation.

FIRST AID

If swallowed	• Immediately call a poison control center or doctor. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.

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If in eyes	• 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.
If inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.

HOT LINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. You may contact 1-800-248-7763 for emergency medical treatment information. You may also contact 1-800-248-7763 for information including health concerns, medical emergencies or pesticide incidents.

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NOTE TO PHYSICIAN: Contains Petroleum Distillates - vomiting may cause aspiration pneumonia.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some materials that are chemical-resistant to this product are listed below. Mixers, loaders, applicators and other handlers including during mixing/loading, repair and cleaning of equipment and disposal of pesticide must wear the following:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves such as barrier laminate, viton, neoprene rubber or nitrile rubber
- Chemical-resistant apron for mixers/loaders, persons cleaning equipment and persons exposed to the concentrate

In addition to the above PPE, mixers and loaders supporting aerial applications to forests must wear at least a NIOSH-approved respirator with:

- A dust/mist filter with MSHA/NIOSH approval number prefix TC-21C, or any R, P, or HE filter.

See Engineering Controls for additional requirements.

USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

ENGINEERING CONTROLS

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)]. Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers.

USER SAFETY RECOMMENDATIONS

- Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should 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.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. Runoff from treated areas or deposition of spray droplets into a body of water may be hazardous to fish and aquatic invertebrates.

Before making the first application in a season, it is advisable to consult with the state or tribal agency with primary responsibility for pesticide regulation to determine if other regulatory requirements exist.

This pesticide is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

Do not apply over bodies of water (lakes, rivers, permanent streams, natural ponds, commercial fish ponds, swamps, marshes or estuaries), except when necessary to target areas where adult mosquitoes are present, and weather conditions will facilitate movement of applied material away from the water in order to minimize incidental deposition into the water body. Do not contaminate bodies of water when disposing of equipment rinsate or washwaters.

PHYSICAL OR CHEMICAL HAZARDS

Do not use, pour, spill or store near heat or open flame.

DIRECTIONS FOR USE

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

For use only by federal, state, tribal or local government officials responsible for public health or vector control, or by persons certified in the appropriate category or otherwise authorized by the state or tribal lead pesticide regulatory agency to perform adult mosquito control application or by persons under their direct supervision.

Precautions and Use Restrictions

- Apply this product only as specified on this label.
- Apply this product at temperatures greater than 50° F and when wind speed equals or exceeds 1 mph.
- Not for use in metered release systems.
- Not for use in outdoor residential misting systems.
- Do not spray this product on or allow it to drift onto cropland (other than crops listed) or potable water supplies.
- In the treatment of corrals, feedlots, animal confinements/houses, swine lots, poultry ranges and zoos, cover any exposed drinking water, drinking fountains and animal feed before application.
- For hand carried and/or lawn mower foggers: Do not fog wet foliage. Do not fog when wind conditions exceed 10 mph. Only use a clean, well maintained and properly calibrated fogger known to give excellent performance. Fog down wind.
- Do not apply by fixed wing aircraft at a height less than 100 feet or by helicopter at a height less than 75 feet unless specifically approved by the state or tribe based on public health needs.
- Apply when wind speed is greater than 1 mph.
- Do not make applications during rain.

Do not retreat site more than once in 3 days. Do not exceed 25 applications at 0.007 lbs permethrin per acre per application or 0.007 lbs PBO per acre per application or 0.18 lbs of permethrin per acre per season or 0.18 lbs PBO per acre per year. More frequent treatments may be made to prevent or control a threat to public and/or animal health determined by a state, tribal or local health or vector control agency on the basis of documented evidence of disease causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

HOW TO APPLY

For proper ground application, mount the fog applicator so that the nozzle is at least 4 ½ feet above ground level and directed out the back of the vehicle. May be applied at speeds of 5 mph up to 20 mph. Failure to follow these label directions may result in reduced effectiveness. For "Aerial Application", refer to the Aerial Application section on this label. PERM-X™ UL 30-30 may be used as is, or diluted with a suitable solvent, i.e., a 60 to 100 second viscosity mineral oil and applied at a rate not to exceed 0.9636 fl oz of PERM-X™ UL 30-30 per acre. Both aerial and ground applications should be made when the wind is less than 10 mph. For exact rates, see the "UNDILUTED" or the "DILUTION" Rates charts on this label. PERM-X™ UL 30-30 is approved for application as an Ultra Low Volume (ULV) Thermal or Non-thermal aerosol (cold fog) to control adult mosquitoes, and other insects as listed on this label, in residential and recreational areas where these insect pests become a problem, such as parks, campsites, woodlands, athletic fields, golf courses, residential area, municipalities, gardens, play grounds, and non-crop waste areas. Treat when mosquitoes or insects are most active and weather conditions are conducive to keeping the fog close to the ground, e.g., cool

temperatures and wind speeds not greater than 10 mph. Applications during the cool hours of night or early morning are usually preferable. Repeat treatment when recommended by Public Health officials, or Mosquito Abatement Districts.

Spray Droplet Size Determination

Ground-Based Application: Spray equipment must be adjusted so that the volume median diameter is less than 30 microns ($D_{v0.5} < 30 \mu\text{m}$) and that 90% of the spray is contained in droplets smaller than 50 microns ($D_{v0.9} < 50 \mu\text{m}$). Directions from the equipment manufacturer or vendor, pesticide registrant or a test facility using laser-based equipment must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

Aerial Application made at ≤ 200 feet above ground elevation: Spray equipment must be adjusted so that the volume median diameter produced is less than 60 microns ($D_{v0.5} < 60 \mu\text{m}$) and that 90% of the spray is contained in droplets smaller than 100 microns ($D_{v0.9} < 100 \mu\text{m}$). The effects of flight speed and, for non-rotary nozzles, nozzle angle on the droplet size spectrum must be considered. Directions from the equipment manufacturer or vendor, pesticide registrant or a test facility using a wind tunnel and laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

Aerial Application made at > 200 feet above ground elevation: Spray equipment must be adjusted so that the volume median diameter produced is less than 70 microns ($D_{v0.5} < 70 \mu\text{m}$) and that 90% of the spray is contained in droplets smaller than 145 microns ($D_{v0.9} < 145 \mu\text{m}$). The effects of flight speed and, for non-rotary nozzles, nozzle angle on the droplet size spectrum must be considered. Directions from the equipment manufacturer or vendor, pesticide registrant or a test facility using a wind tunnel and laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

ULV NON-THERMAL AEROSOL (COLD FOG)

To control adult mosquitoes, flies, and gnats (black flies) apply PERM-X™ UL 30-30 using truck-mounted ground ULV (cold fog) equipment with a swath width of 300 feet in areas such as residential, recreational, industrial areas. For best results, apply when insects are most active and conditions are conducive to keeping the fog close to the ground. Apply the undiluted product at flow rates of 0.5472 to 2.1816 fluid ounce per minute at a truck speed of 10 mph. These rates are equivalent to 0.00175 to 0.007 pounds of permethrin a.i. and 0.00175 to 0.007 pounds of piperonyl butoxide a.i. per acre. If a different vehicle speed is used, adjust the flow rate accordingly. An accurate flow control system must be used to ensure proper flow rate. Use the maximum flow rates and application rates listed on this label to treat heavy vegetation or when target insect populations are high. Do not exceed the highest flow rates specified by the manufacturer. PERM-X™ UL 30-30 may also be applied by diluting with 60-100 second mineral oil or another suitable solvent, applied so as not to exceed 0.007 lb a.i. per acre using a swath width of 300 feet for calculation. Refer to the rates chart for suggested rates for diluted use. PERM-X™ UL 30-30 may be used to treat outdoor aggregation and harborage sites including storm drains, underground drainage pipes, and pipe chases.

THERMAL AEROSOL FOGGING

Refer to the DILUTION RATES tables for fogging applications. Droplet size of thermal "fog" will be very small usually in the 0.5 to 1.0 micron range.

TRUCK-MOUNTED - Apply PERM-X™ UL 30-30 diluted or undiluted with suitable thermal fogging equipment. If diluted, use a 60 to 100 second viscosity mineral oil or another suitable non-phytotoxic diluent, to reduce oil requirement and sludge buildup in equipment. Do not exceed the maximum 0.007 lb a.i. permethrin per acre rate. May be applied at speeds of 5 mph up to 20 mph. For use with HAND CARRIED and/or LAWN MOWER FOGGERS, use the same rates of a.i. per acre with a 50 foot swath width at a walking speed of 2 mph. Apply PERM-X™ UL 30-30 at 0.00175 lb to 0.007 lb of a.i. permethrin/a.i. piperonyl butoxide per acre.

USE AS AN INSECT BARRIER AS AN INSECT BARRIER – USE A “BACKPACK” FOG-TYPE MIST BLOWER

For use in Non-Thermal ULV, motorized, portable, backpack, fog-type mist blower equipment, apply PERM-X™ UL 30-30 with equipment adjusted to deliver ULV particles of 50 to 100 volume median diameter. PERM-X™ UL 30-30 may be applied undiluted or diluted (see Application Rates tables section). If diluted, use a 30 to 100 second viscosity mineral oil, or another, (if recommended by Public Health Officials), suitable non-phytotoxic diluent. Use 0.00175 to 0.007 pound permethrin a.i. per acre at a 50 ft (15.2 m) swath width, while walking at a speed of 2 mph (3.2 kph). Whether applied undiluted or diluted or at a different speed, make sure that the same amount of permethrin a.i. – PBO a.i. is applied/acre.

DIRECTIONS FOR AERIAL APPLICATION

Use aircraft specially equipped and capable of applying Ultra-Low Volumes of PERM-X™ UL 30-30 according to the rate chart on this label. Applications can be made diluted or undiluted but cannot exceed the specified rates of 0.007 lbs permethrin per acre and 0.007 lbs PBO per acre, equivalent to 0.3646 fl oz of undiluted PERM-X™ UL 30-30 per acre. Applications should be made at an altitude of 100 to 300 feet. Apply at airspeed sufficient to deliver the appropriate amount of active ingredient per acre. A forward speed of 150 mph achieving a swath width of 500 feet is recommended. The minimum height (from the ground) for aerial application of this product is 100 feet. Treat when insects are most active and meteorological conditions are conducive to keeping the spray cloud close to the ground. In order to compensate for windy conditions and ensure drift onto the target area, aerial application with aircraft equipped with Global Positioning Systems (GPS) is recommended.

PROHIBITION ON AERIAL USE IN FLORIDA: Not for aerial use in Florida UNLESS specifically authorized by the Bureau of Entomology and Pest Control, Florida Department of Agriculture and Consumer Services.

This product can be applied over specific growing crops prior to harvest and range grasses for the control of adult mosquitoes and biting flies within or adjacent to these areas. Application can only be made where the following crops are present:

Alfalfa, Almonds, Apples, Artichokes, Asparagus, Avocados, Broccoli, Brussel sprouts, Cabbages, Cantaloupes, Cauliflower, Celery, Cherries, Corn (field and pop), Corn (sweet), Eggplants, Filberts (Hazelnuts), Garlic, Horseradish, Lettuce, Onions (dry bulb only), Papayas (FL only), Peaches/Nectarines, Pears, Bell peppers, Pistachios, Potatoes, Soybeans, Spinach, Tomatoes, and Walnuts.

Cucurbit vegetables, including Chayote (fruit), Chinese wax gourd (Chinese preserving melon), Citron melon, Cuban pumpkin, Cucumber, Gherkin, Gourd (edible, includes hyotan, cucuzza, hechima, Chinese okra), *Momordica* spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (hybrids and/or cultivars of *Cucumis melo* including true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon and winter melon), Pumpkin,

Squash (includes summer squash types such as: butternut squash, calabaza, crookneck squash, Hubbard squash, scallop squash, straightneck squash, vegetable marrow and zucchini, and winter squash types such as: acorn squash and spaghetti squash), Watermelon (includes hybrids and/or varieties of *Citrullus lanatus*).

Leafy Vegetables, including Leafy vegetables (except *brassica*) (Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (roquette), Chervil, Chrysanthemum (edible leaved and garland), Corn salad, Cress (garden), Cress (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chicory), Spinach (including New Zealand and vine (Malabar spinach, Indian spinach)).

Conditions and Rates To Use Perm-X™ UL 30-30 Undiluted						
Pounds A.I. Per Acre		Application Rates				Fluid Ounces of Perm-X™ UL 30-30 per Acre
		Fluid Ounces per Minute at MPH				
Permethrin	PBO	5 mph	10 mph	15 mph	20 mph	
0.00700	0.00700	1.0938	2.1876	3.2814	4.3752	0.3646
0.00350	0.00350	0.5468	1.0938	1.6507	2.1876	0.1823
0.00175	0.00175	0.2736	0.5472	0.8208	1.0944	0.0912

DILUTION RATES FOR PERM-X™ UL 30-30 FOR A 1:4 DILUTION

Mix 1 part PERM-X™ UL 30-30 with 4 parts Suitable Mineral Oil: Apply as follows:						
Pounds of A.I. Per Acre		Application Rates FI Oz Per Minute At Vehicle Speeds				FI Oz Finished Spray Per Acre
Permethrin	PBO	5 mph	10 mph	15 mph	20 mph	
0.00700	0.00700	5.3847	10.7694	16.1541	21.5388	1.7949
0.00350	0.00350	2.6925	5.3850	8.0775	10.7700	0.8975
0.00175	0.00175	1.3464	2.6928	4.0932	5.3856	0.4488

DILUTION RATES FOR PERM-X™ UL 30-30 FOR A 1:8 DILUTION

Mix 1 part PERM-X™ UL 30-30 with 8 parts Suitable Mineral Oil: Apply as follows:						
Pounds of A.I. Per Acre		Application Rates FI Oz Per Minute At Vehicle Speeds				FI Oz Finished Spray Per Acre
Permethrin	PBO	5 mph	10 mph	15 mph	20 mph	
0.00700	0.00700	9.5457	19.0914	28.6371	38.1828	3.1819
0.00350	0.00350	4.7727	9.5454	14.3181	19.0908	1.5909
0.00175	0.00175	2.3862	4.7730	7.1595	9.5460	0.7955

DILUTION RATES FOR PERM-X™ UL 30-30 FOR A 1:2 DILUTION

Mix 1 part PERM-X™ UL 30-30 with 2 parts Suitable Mineral Oil: Apply as follows:						
Pounds of A.I. Per Acre		Application Rates Fl Oz Per Minute At Vehicle Speeds				Fl Oz Finished Spray Per Acre
Permethrin	PBO	5 mph	10 mph	15 mph	20 mph	
0.00700	0.00700	3.2814	6.5628	9.8442	13.1256	1.0938
0.00350	0.00350	1.6407	3.2814	4.9221	6.5628	0.5469
0.00175	0.00175	0.8205	1.6410	2.4615	3.2820	0.2735

STORAGE & DISPOSAL

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

PESTICIDE STORAGE AND SPILL PROCEDURES: Store upright at room temperatures. Do not expose to extreme temperatures. In case of spill or leakage, ventilate the area, wear chemical-resistant gloves and footwear. Retrieve and filter the liquid in some manner and use as directed on this label or soak up the liquid with absorbent material such as sawdust, soil, fuller's earth, etc. and dispose of the resulting chemical waste as follows.

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

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. **Containers 5 gallons or less:** Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with mineral oil (or other solvent used when diluting the product) 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. Then offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. **Containers larger than 5 gallons:** Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with mineral oil (or other solvent used when diluting the product). Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, offer for recycling if available, reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded. The Directions for Use of this Product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Central Garden & Pet Company or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Central Garden & Pet Company and Seller harmless for any claims relating to such factors. Central Garden & Pet Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Central Garden & Pet Company, and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, CENTRAL GARDEN & PET COMPANY MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE. To the extent consistent with applicable law, in no event shall Central Garden & Pet Company or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. To the extent consistent with applicable law, **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF CENTRAL GARDEN & PET COMPANY AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF CENTRAL GARDEN & PET COMPANY OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Central Garden & Pet Company and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of Central Garden & Pet Company.

Central Garden & Pet Company, 1501 East Woodfield Road, 200W, Schaumburg, Illinois 60173

NOTE: This specimen label is for informational purposes only. All uses may not be approved in all states. See product labeling for use directions.

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