

PM 25
3125-282

1 of 6

YLD27

Base Pre-Reg. (5888)

U.S. LABEL

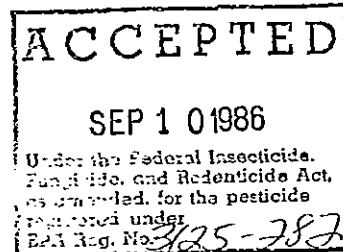
Reason to Issue: Add directions for
tank mixing with adjuvants; 5/9/86 Draft:
Revise based on internal review comments.

Date of Draft: 5/9/86 (Pre-Reg) (H)
Supersedes Pre-Reg Draft Dated: 9/18/85

® DEF 6

EMULSIFIABLE DEFOLIANT

Very Low Odor



FOR FAST AND EFFECTIVE COTTON
DEFOLIATION

Contains 6 pounds S,S,S-Tributyl
phosphorotriothioate per U.S.
gallon.

NET CONTENTS GALLONS

ACTIVE INGREDIENT:

S,S,S-Tributyl phosphorotri-
thioate 70.5%

INERT INGREDIENTS: 29.5%
100.0%

WARNING

KEEP OUT OF REACH OF CHILDREN
(See rear panel for statements
of practical treatment and
other precautions)

EPA Reg. No. 3125-282-AA

DO NOT USE OR STORE NEAR HEAT OR
OPEN FLAME

AVISO

PRECAUCION AL USUARIO: Si usted no puede
leer o entender inglés, no use este producto
hasta que la etiqueta le haya sido explicada
ampliamente.

(TO THE USER: If you cannot read or under-
stand English, do not use this product until
the label has been fully explained to you.)

STOP - READ THE LABEL BEFORE USE

MOBAY CHEMICAL CORPORATION
AGRICULTURAL CHEMICALS DIVISION
Box 4913, Kansas City, Missouri 64120

Note: Underlined letters in chemical nomenclature should be italicized when printed,
not underlined.

DEF 6

DIRECTIONS FOR USE

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

IMPORTANT: Read these entire Directions and Conditions of Sale before using DEF 6 emulsifiable defoliant.

CONDITIONS OF SALE: THE DIRECTIONS ON THIS LABEL WERE DETERMINED THROUGH RESEARCH TO BE THE DIRECTIONS FOR CORRECT USE OF THIS PRODUCT. THIS PRODUCT HAS BEEN TESTED FOR A RANGE OF WEATHER CONDITIONS SIMILAR TO THOSE WEATHER CONDITIONS THAT ARE ORDINARY AND CUSTOMARY IN THE GEOGRAPHIC AREA WHERE THE PRODUCT IS USED. INSUFFICIENT CONTROL OF PESTS AND/OR INJURY TO THE CROP TO WHICH THE PRODUCT IS APPLIED MAY RESULT FROM THE OCCURRENCE OF EXTRAORDINARY OR UNUSUAL WEATHER, OR FROM FAILURE TO FOLLOW LABEL DIRECTIONS. IN ADDITION, FAILURE TO FOLLOW LABEL DIRECTIONS MAY CAUSE INJURY TO OTHER CROPS, ANIMALS, MAN, OR THE ENVIRONMENT. MOBAY OFFERS, AND THE BUYER ACCEPTS AND USES, THIS PRODUCT SUBJECT TO THE CONDITIONS THAT EXTRAORDINARY OR UNUSUAL WEATHER, OR FAILURE TO FOLLOW LABEL DIRECTIONS ARE BEYOND THE CONTROL OF MOBAY AND ARE, THEREFORE, THE RESPONSIBILITY OF THE BUYER.

Under favorable conditions DEF 6 gives effective defoliation of cotton within four to seven days after application. DEF 6 drops the leaves in a green condition and does not appear effective until defoliation actually begins. When continued low temperatures prevail at night (below 60° F.), complete defoliation may require nine to fourteen days. DEF 6 may be used whether or not moisture is present on cotton, and the presence or absence of dew or rain, during or following application, does not adversely affect the performance. DEF 6 does not suppress second growth, especially where rainfall follows defoliation. Schedule all applications in accordance with local recommendations. Consult your State Agricultural Experiment Station or Extension Service for specific use information.

COMPLETE DEFOLIATION:

Proper timing: DEF 6 should be applied to mature cotton plants when 50% or more of the bolls are open and 7 to 10 days prior to anticipated picking. Plants are considered suitably mature if the youngest bolls (1) cannot be dented by pressure between thumb and forefinger or (2) cannot easily be cut through with a sharp knife.

Thorough Coverage: All leaves must be treated to accomplish complete defoliation.

Rainfall: DEF 6 will provide efficient complete defoliation when properly applied, whether rain or dew is present during or after application, but does not suppress second growth, especially in areas where rainfall follows treatment sufficient to delay picking.

DEFOLIATION AND INHIBITION OF REGROWTH: (Except California)

To obtain defoliation, and to provide improved inhibition of regrowth or secondary growth, apply DEF 6 according to label directions, at rates of 1.0 to 1-1/3 pints per acre, as a tank-mix combination with 0.066 to 0.1 lb of Dropp 50WP defoliant and regrowth inhibitor. Best activity will be obtained where the tank mix is applied to mature cotton plants when 60% or more of the bolls are open and where the average mean 24-hour temperature before and after application is above 60°F. Use the lower rates of each product when conditions are favorable for rapid defoliation (high temperatures and high humidity). Adverse conditions, such as low temperature, may require the use of the higher dosages and/or longer times for complete defoliation. A second application of labeled rates of the tank-mix combination, or of DEF 6 alone, may be made where necessary.

DIRECTIONS FOR USE (Continued)

Do not apply DEF 6 plus Dropp 50% W.P. to immature cotton (less than 60% of bolls open) or use higher than recommended dosages of either product in tank-mix combination, since desiccation and leaf freezing may occur.

Apply as a dilute spray in 5 to 10 gallons of water per acre by air or 10 to 25 gallons of water per acre with ground equipment. Do not apply in oil carrier.

Always follow the mixing suggestions found on this label or on the appropriate adjuvant label.

It is suggested that adjuvants be tested on a limited scale prior to large scale use. Contact your local Mobay representative for additional information.

When applying DEF 6 defoliant and Dropp 50WP defoliant as a tank-mix combination, the following order of mixing is recommended: (1) water, (2) Dropp 50WP (according to directions on Dropp label), (3) adjuvant, if used, and (4) DEF 6 after Dropp has completely dispersed.

BOTTOM DEFOLIATION:

Much seed cotton is lost due to rot and exposure in the bottom bolls which are the first to mature. An application of DEF 6 using shielded drop nozzles (four 8001 fans or two 1/8 K 1 or 1.5 flooding) to the lower leaves where all the bolls are mature will cause the treated leaves to drop, exposing the mature bolls to air movement and sunlight. By removing the top 8 to 12 rows of spindles from a picker, the exposed bolls may be harvested. DEF 6 leaves the plant green and flexible so that no damage is done by the picker to the untreated top leaves and immature bolls. Complete defoliation and picking can follow, usually in 3 to 4 weeks. Other additional benefits gained by bottom defoliation, even without picking the exposed bolls, are:

Reduction of boll rot (up to 1/4 to 1/2 bale per acre).

Faster rate of opening of lower mature bolls.

Reduced lodging.

Higher grade of cotton.

More cotton from fewer pickings.

DILUTE SPRAYS

MIXING: DEF 6 forms an emulsion when diluted with water and is suitable for use in all power-operated ground and aircraft sprayers. It is non-corrosive and non-clogging to spray equipment and does not constitute a fire hazard.

DEF 6

DILUTE SPRAYS (Cont'd)

DEF 6 may be added to diesel oil, in accordance with local recommendations, to increase effectiveness, particularly where night temperatures drop to below 60° F., where plants have had insufficient moisture, and on storm-proof varieties of cotton. The use of 3 to 5 gallons of oil per acre is generally required for aircraft spraying, while 5 to 10 gallons is recommended for ground applications. Where oils are used, particular care should be exercised to avoid spray drift to adjacent crops.

DOSAGE: Use specified dosage of DEF 6 per acre in the amount of water or diesel oil necessary to give complete coverage. The quantity of water or oil to be used per acre is dependent somewhat upon the equipment used. In all cases, however, sufficient spray should be applied to treat all leaves. Larger droplets more effectively reach the lower leaves. The gallons of water ordinarily required for adequate coverage are recommended in the table below for both air and ground spray applications. Make sure the spray pattern is such that a uniform wetting of leaf surfaces results.

Addition of Adjuvants: DEF or DEF + Dropp may also be applied with an adjuvant (1) blends of vegetable or petroleum-based oils and suitable emulsifiers, or 2) non-ionic surfactants to improve spray coverage. Only products which are exempt from tolerance under 40 CFR 180.1001 may be used. Prior to mixing in the spray tank, it is suggested that a compatibility test be run to determine the compatibility of DEF or DEF + Dropp with the adjuvant to be used.

RECOMMENDED APPLICATIONS

CROP	Pints DEF 6	Gallons of Water		DIRECTIONS
		Air	Ground	
Cotton	1-1/3 to 2	5 to 10	15 to 25	<u>COMPLETE DEFOLIATION</u> Apply specified dosage per acre in recommended gallons of water to give thorough coverage to mature cotton when 50% or more of the bolls are open. Applications can be made until first frost but should not be used within 7 days of picking. For rank cotton, see recommendation below.
	1 to 1-1/2	-	10 to 15	<u>BOTTOM DEFOLIATION</u> Apply specified dosage* per acre in recommended gallons of water with spray directed only on the lower part of the plant in the area where only mature bolls are found. Do not use within 7 days of picking. *The bottom defoliation rate should be proportional to the fraction of the plant to be defoliated.
Rank Cotton	3	5 to 10	15 to 25	<u>COMPLETE DEFOLIATION OF RANK COTTON</u> Apply specified dosage per acre in the recommended amount of water to give thorough coverage of mature cotton when 50% or more of the bolls are open. Schedule 2 applications of the specified dosage two to six weeks apart for complete defoliation of rank cotton. Applications can be made until first frost but not within 7 days of picking.

PRECAUTIONS

If chlorate type chemicals have been used in the same spray equipment, thoroughly wash spray tank and particularly dried deposits on aircraft fabric.

DEF 6

RESTRICTIONS

Do not use on other crops used for food or forage. Avoid spray drift to susceptible plants other than cotton as this product may injure or defoliate other crops. (Coarse sprays are less likely to drift.)

Thoroughly clean the spray equipment with a chemical cleaner before using for other products.

Do not store near fertilizers, seeds, insecticides, fungicides.

STORAGE AND DISPOSAL

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

Pesticide wastes are toxic. 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.

Container Disposal: 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.

Store in a cool, dry place, away from open flame and extreme heat, and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If container is leaking invert to prevent leakage. If the container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides above. In spill or leak incidents, keep unauthorized people away. You may contact the Mobay Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Mobay Kansas City Emergency Response Telephone No. is 816-242-2582, or contact Chemtrec at 800-424-9300.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

May be fatal if swallowed, inhaled, or absorbed through the skin. Do not breathe spray mist. Do not get in eyes, on skin, or on clothing. Wash with soap and warm water after handling and before eating or smoking.

For protection during application wear a hat, long sleeved shirt and long legged trousers. In addition, mixer-loaders must wear rubber or neoprene gloves.

Do not contaminate feed or food. Keep out of reach of children.

DEF 6

STATEMENTS OF PRACTICAL TREATMENT

If swallowed, vomiting should be induced. Administer water freely and induce vomiting by giving one dose (1/2 oz. or 15 ml.) of syrup of ipecac. If vomiting does not occur within 10 to 20 minutes, administer second dose. If syrup of ipecac is not available, induce vomiting by sticking finger down throat. Repeat until vomit fluid is clear. Never give anything by mouth to an unconscious person. Have patient lie down and keep quiet. Professional medical assistance should be secured immediately.

In case of contact, remove contaminated clothing and flush skin and eyes with plenty of water. Wash contaminated clothing with soap and hot water before reuse. If poisoning occurs, obtain prompt medical aid.

TO PHYSICIAN:

This product inhibits cholinesterase resulting in stimulation of the central nervous system, the parasympathetic nervous system and the somatic motor nerves. Poisoning with this product also results in cardio-vascular and respiratory symptoms which must be treated as separate pathological entities apart from the cholinergic effects.

Use atropine sulfate to reverse cholinergic symptoms; and maintain a systematic, symptomatic treatment of the cardio-vascular and respiratory effects, even though the cholinergic symptoms have ceased. Do not give central nervous system depressants. Watch for pulmonary edema, which may develop in serious cases of poisoning even after 12 hours. The use of oxygen is recommended in case of respiratory distress.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Keep out of lakes, streams, or ponds. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment, or disposal of wastes. Apply this product only as specified on this label.

DEF is a Reg. TM of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen.

Dropp is a trademark of Nor-Am Chemical Corporation.