

GENERAL: Profal is a cotton defoliant used to remove leaves prior to hand picking or machine harvesting. Formulated as a liquid emulsifiable concentrate, Profal can be added directly to the spray tank as it is being filled with water or white diesel oil. Profal is noncorrosive and will not damage parts normally used in applying spray chemicals. Agitate the spray mix before and during application.

Profal readily disperses leaves in a spray pattern and will not appear effective until defoliation actually begins approximately 7 days after application. By this time the field will have an appearance similar to that of a field treated with a defoliant. Under the most favorable conditions, defoliation will be complete by 14 days. Under less favorable conditions, defoliation may require 21 days.

DIRECTIONS FOR USE

BOTTOM DEFOLIATION: To prevent a regrowth of leaves of the bottom crop to boll rot. For maximum effectiveness, apply Profal by high clearance spraying at the rate of one gallon per six acres (1 1/2 pints in 10-15 gallons of water per acre) as soon as bottom bolls are mature or just before plants grow together and form a canopy of foliage to shade the ground. In either case, use four fan or two flooding nozzles per row and direct spray to cover all leaves up to the level of the highest mature bolls. Adjust pressure and speed to give fine droplets but maintain correct volume per acre.

PRE-CONDITIONING: To retard rank growth and induce maturity of green plants prior to total defoliation. Apply Profal at the rate of one-half pint per acre by airplane or by ground equipment approximately 7-10 days before making the application for total defoliation (either by adding this amount to the last insecticide application or by making a separate Pre-Conditioning application). Use Profal as a Pre-Conditioner only after fiber quality of the youngest bolls which will be harvested will not be damaged. Do not mix Profal with insecticide formulations which contain quantities of organic solvents. Pre-Conditioning of early-maturing cotton varieties is generally not recommended.

TOTAL DEFOLIATION: Under normal conditions, it is safe to apply Profal when the majority of the top bolls will not be damaged by frost. Apply Profal when the majority of the top bolls have reached maturity. Profal will not damage the bolls during any treatment to open prematurely.

Follow Pre-Conditioning, apply 1/2 pint per acre in water. Do not spray when temperature is below 55° F. Do not use white diesel oil instead of water if frost is a real hazard.

The following table is a guide to use when plants have not been Pre-Conditioned. It can be substituted for Pre-Conditioning with the total application.

PROFAL

Phosphate Cotton Defoliant

EMULSIFIABLE CONCENTRATE

100 lbs. Mixture per Gallon

S	C	H
P	S	C
	S	C

ACTIVE INGREDIENTS

Tributyl Phosphorotriacetate	71.2%
Related Compounds	3.8%

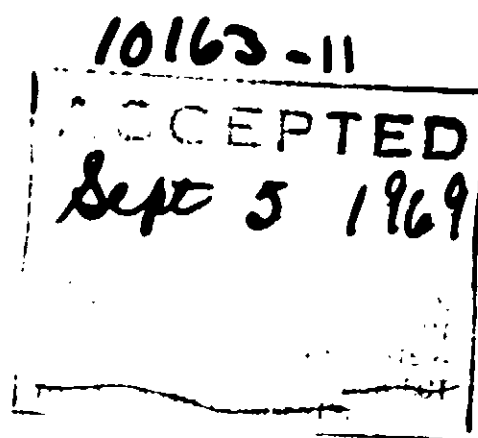
INERT INGREDIENTS

	25.0%
	100.0%

CAUTION

KEEP OUT OF REACH OF CHILDREN

See Right-hand Side Panel for Additional Cautions



USDA Registration No. 10163-11

NET CONTENTS

Defoliation Conditions	Minimum Night Temps.	Pints/Acre	Apply In
Ideal	Above 65 F	1 1/2	Water
Average	55-65 F	1 1/2-2	Water
Adverse	Below 55 F	2	White Diesel Oil

Apply to water application if plants are not wilting. Apply to white diesel oil if plants are not wilting. Apply to water if plants are wilting. Apply to white diesel oil if plants are not wilting.

HOW TO APPLY: Use a high clearance spray nozzle per row with four fan or two flooding nozzles per row and direct spray to cover all leaves up to the level of the highest mature bolls. Adjust pressure and speed to give fine droplets but maintain correct volume per acre. Avoid application close as possible to the plant top and avoid application in excessive temperatures of maturity and when cause drift to adjacent fields.

TOUCH-UP APPLICATIONS: Pre-Conditioning will reduce the necessity for two total applications. However, if leaves are extremely tough or plants are heavily lodged, it is desirable to follow the initial total application in 5-7 days with a touch-up treatment. If you use 1 1/2 pints per acre in white diesel oil. (See table for gallonage.)

NOTE: This product is toxic to fish and wildlife in lakes, ponds and streams. Do not apply in any way specified on the label.

CAUTION

Harmful if swallowed, inhaled, or exposed to skin. Do not spray mist. Avoid contact with skin, eyes and clothing. If on skin, wash immediately with warm water and soap. If in eyes, flush with water. If on clothing, wash with soap and water. If on hands, wash with soap and water. Wash all contaminated clothing with water and soap.

NOTICE ON CONDITIONS OF SALE

The Dune Company is not responsible for any loss of crop or damage to property caused by the use of this product. The user must follow the instructions on the label and use the product in accordance with the instructions.

CALIFORNIA (Plant)
P. O. BOX 406
340 EAST MAIN STREET
CALIPATRIA, CALIF. 92233
TELEPHONE 348-5150

THE DUNE COMPANY
AGRICULTURAL CHEMICALS

ARIZONA
RT. 1, BOX 100
SOMERTON, ARIZONA
TELEPHONE 348-5150

Defoliant used to remove leaves before harvesting. Formulated as a concentrate, Profal can be added directly to water or white diesel oil. It will not damage parts normally used. Agitate the spray mix before and after use. Use in a green condition and will not defoliate until the plants are approximately 1/2 grown. By this time the plants will have developed a satisfactory root system. A heavy application will result in a heavy plant, but will not extend the life of the plant.

PROFAL

Phosphate Cotton Defoliant

EMULSIFIABLE CONCENTRATE

USE FOR USE

To prevent or remove leaves at the maximum effectiveness, apply Profal at the rate of one gallon per acre (or 100 lbs. of water per acre) as soon as possible before plants grow together to shade the ground. In either case, use 5 nozzles per row and direct the spray to the level of the highest mature plants to give fine droplets but maintain

rank growth and induce mature defoliation. Apply Profal at the rate of one gallon per acre by airplane or by ground equipment before making the application. Add this amount to the last application of a separate Pre-Conditioning Pre-Conditioner only after fiber which will be harvested will not be in insecticide formulations which are not recommended.

In normal conditions, it is safe to apply Profal to the top bolls which will not be damaged. Top bolls will not be damaged if they are not directly sprayed.

Apply Profal at the rate of one gallon per acre in water or white diesel oil below 55 F. Water or diesel oil should be used in the following quantities: 100 gallons per acre when plants have a heavy root system satisfactorily

Contains 6 lbs. Morphos per Gallon

S C: H.
P S C: H.
S C: H

ACTIVE INGREDIENTS

Tributyl Phosphorothioate 71.2%
Related Compounds 3.8%

INERT INGREDIENTS

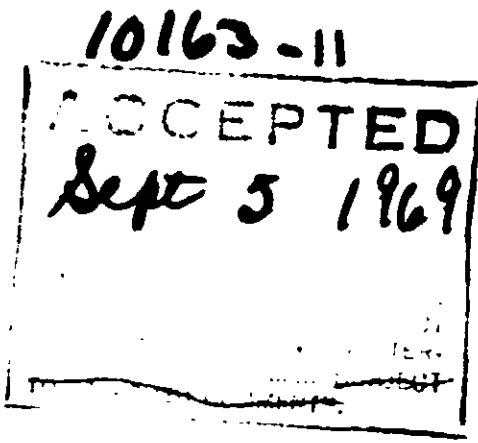
25.0%

100.0%

CAUTION

KEEP OUT OF REACH OF CHILDREN

See Right-hand Side Panel for Additional Cautions



USDA Registration No. 10163-11

NET CONTENTS

Defoliation Conditions	Minimum Night Temps.	Pints/Acre	Apply In	Gallon Total Spray/Acre Air	Gallon Total Spray/Acre Ground
Ideal	Above 65 F	1 1/2	Water	5-12	15-25
Average	55 - 65 F	1 1/2 - 2	Water	5-12	15-25
Adverse	Below 55 F	2	Diesel Oil	5-8	10-15

Rain following application of Profal in water will not reduce the effectiveness if it has been absorbed by the leaf. Conditions which delay absorption are primarily those which cause the cotton to wilt, be water-soaked or leathery. When these conditions prevail, use diesel oil instead of water.

HOW TO APPLY: Ground machines should have at least 5 nozzles per row including one overhead nozzle and have pressure and speed adjusted to give fine droplets yet maintain the correct spray volume per acre. Aerial applicators should fly as close as possible to the plant tops and avoid application during the excessive temperatures of mid-day and when winds may cause drift to adjacent fields.

TOUCH-UP APPLICATIONS: Pre-Conditioning will usually eliminate the necessity for two total applications. However, when leaves are extremely tough or plants badly lodged, it may be desirable to follow the initial total application in approximately 5-7 days with a touch-up treatment. If so, use 1 1/2 pints Profal per acre in white diesel oil. (See table for gallonage.)

NOTE: This product is toxic to fish and wildlife. Keep out of lakes, ponds and streams. Do not apply in any manner not specified on the label.

CAUTION

Harmful if swallowed, inhaled or exposed to skin. Do not breathe spray mist. Avoid contact with skin, eyes and clothing. If spilled on skin, wash immediately with warm water and soap. Keep away from feeds, foodstuffs, pets, livestock and children. After use, wash hands, arms and face thoroughly with warm water. Wash all contaminated clothing with hot water and soap before re-use.

NOTICE ON CONDITIONS OF SALE

The Dune Company makes No Warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and/or handling of this material when such use and/or handling is contrary to label instructions.

THE DUNE COMPANY

AGRICULTURAL CHEMICALS

ARIZONA
RT. 1, BOX 33
SOMERTON, ARIZONA 85350
TELEPHONE 627-2470