

AVENGE • TECHNICAL
For Formulation Of AVENGE Wild Oat Herbicides Only

CYANAMID

Active Ingredient:

Difenzoquat methyl sulfate*, 96.0%

Inert Ingredients, 4.0%

*1,2-dimethyl-3,5-diphenyl-1H-pyrazolium methyl sulfate

EPA Reg. No. 241-239-AA

EPA Est. No. 241-NJ-01

WARNING!

KEEP OUT OF REACH OF CHILDREN

See Side Panel For Other Warnings

AVISO

AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

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

NOTE TO FORMULATORS: Refer to American Cyanamid Company's AVENGE Wild Oat Herbicide Information Bulletin for information on the chemical and physical properties and toxicology of AVENGE.

In case of an emergency endangering life or property involving this product, call collect, day or night, Area Code 201-835-3100.

Net Weight: 525 Lbs.

22901-06

D40

ACCEPTED

JUL 7 1975

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 241-239

WARNING!

HARMFUL IF SWALLOWED OR INHALED.
Causes skin irritation.
Do not get on skin or clothing.
Avoid breathing dust.
Keep container closed.
Use with adequate ventilation.
Wash thoroughly after handling.
Do not contaminate food or feed products.

FIRST AID

If swallowed, drink promptly a large quantity of milk, egg whites, gelatin solution or if these are not available drink large quantities of water. Avoid alcohol. Call a physician.

DRUM DISPOSAL: Destroy empty drums by burning. Stay away from smoke and fumes.

DISCLAIMER

American Cyanamid Company warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use.

Any damages arising from a breach of this warranty shall be limited to direct damages, and shall not include consequential commercial damages such as loss or profits or values, etc.

American Cyanamid Company makes no other express or implied warranty, including any other express or implied warranty of FITNESS or of MERCHANTABILITY.

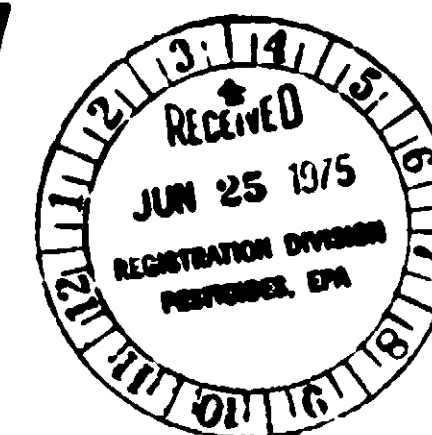
USER assumes the risk of any use contrary to label instructions or under abnormal conditions, or under conditions not reasonably foreseeable by American Cyanamid Company.

AMERICAN CYANAMID COMPANY
AGRICULTURAL DIVISION
PRINCETON, NJ 08540

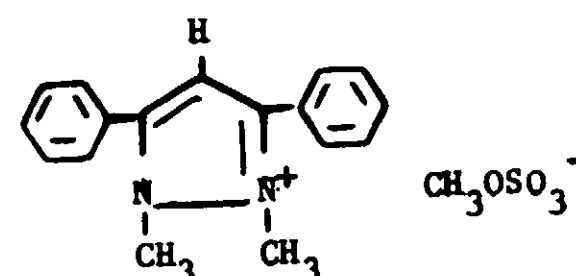
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INFORMATION BULLETIN

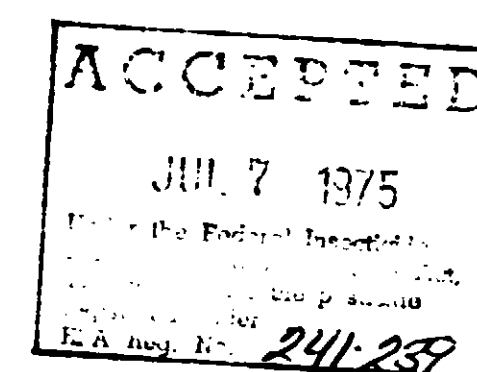
NAME, CHEMICAL IDENTITY AND COMPOSITION OF
AVENGE® WILD OAT HERBICIDE



Tradename: AVENGE® Wild Oat Herbicide
Common Name: Difenzoquat methyl sulfate
Chemical Name: 1,2-dimethyl-3,5-diphenyl-1H-pyrazolium methyl sulfate
Other Designations: AC 84,777 CL 84,777
Structural Formula:

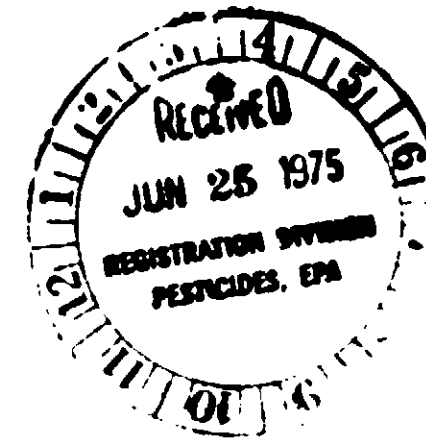


Empirical Formula: C₁₈H₂₀N₂SO₄
Molecular Weight: 360.4
Color and State: White crystalline solid
Purity: 96.0%
Odor: Odorless
Melting Point: 155-157°C
Density: 41 lbs./cu. ft. (10 - 50 mesh)
Vapor Pressure: None
Solubility: 76.2% in water @ 23°C



Water:	Temperature (°C)	Solubility, % (W/W)
	0	26.8
	18	69.3
	23	76.5
	37	78.2
	56	85.6
Xylene:	0.01 g/100 ml at 25°C	
Isopropyl Alcohol:	0.07 g/100 ml at 25°C	
Kerosene:	Insoluble at 25°C	
Chlorobenzene:	0.04 g/100 ml at 25°C	
Ethylene Dichloride:	8 g/100 ml at 25°C	

Toxicology



Acute Oral

<u>Species</u>	<u>Product</u>	<u>Effect</u>
Albino Rat - Male	Technical	LD ₅₀ 270 mg/kg
Albino Mouse - Male	Technical	LD ₅₀ 31 mg/kg
Albino Mouse - Female	Technical	LD ₅₀ 44 mg/kg
Albino Rabbit - Male	Technical	LD ₅₀ 470 mg/kg

Acute Dermal

Albino Rabbit - Male	Technical	LD ₅₀ 3540 mg/kg
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Irritation

Skin		
Albino Rabbit - Male	Technical	Moderate
Eye		
Albino Rabbit - Male	Technical	Very slight

Inhalation

Albino Rat	Technical	Slight
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