



# MATERIAL SAFETY DATA SHEET FOR

## BENLATE® FUNGICIDE

MANUFACTURER: E. I. DU PONT DE NEMOURS & CO. (INC.)  
BIOCHEMICALS DEPARTMENT  
WILMINGTON, DE 19898

FOR CHEMICAL EMERGENCY: CALL CHEMTREC TOLL FREE DAY OR NIGHT  
(800) 424-9300 --- WORLDWIDE (202) 483-7616  
OR CALL DU PONT (302) 774-2421

500 FIVE

Active Ingredient:  
Benomyl [Methyl 1-(butylcarbamoyl)-2-benzimidazolecarbamate].....500  
Inert Ingredients.....500

### SECTION I - PHYSICAL DATA

Physical Form: Off-white powder  
Vapor Pressure: Negligible  
Sol. in Water: Water-dispersible  
Specific Gravity: Bulk density about 24 lbs/ft<sup>3</sup>

### SECTION II - HEALTH HAZARDS

Statement of Hazards: Caution! May irritate eyes, nose, throat, and skin.  
Precautionary Measures: Avoid breathing dust or spray mist. Avoid contact with skin, eyes, and clothing. Wash thoroughly after using.  
First Aid: In case of contact, flush skin or eyes with plenty of water; for eyes, get medical attention.  
Acute Oral LD50 (Rats): >10000 mg/kg (for "Benlate" Fungicide)  
Exposure Limits: Du Pont acceptable exposure limit (AEL; 8-hour or 12-hour time weighted average): 5 mg/m<sup>3</sup> (for active ingredient)

#### NOTICE FROM DU PONT

THE INFORMATION CONTAINED HEREIN IS OFFERED ONLY AS A GUIDE TO THE HANDLING OF THIS SPECIFIC MATERIAL. SINCE SUCH INFORMATION DOES NOT RELATE TO USE OF THE MATERIAL WITH ANY OTHER MATERIAL OR IN ANY PROCESS, ANY PERSON USING THIS INFORMATION MUST DETERMINE ITS SUITABILITY FOR ANY PARTICULAR APPLICATION.

Spill or Leak Procedure: Clean up promptly by scoop or vacuum; flush remaining residue with water (prevent contamination of sewers or bodies of water). Where dust levels may exceed AEL value, an approved pesticide respirator, goggles, and protective clothing should be worn.

### SECTION III - FIRE HAZARDS

Auto Ignition Temperature: 220°C  
Min. Ignition Energy: 0.073 joules  
Max. Pressure Rise: 6340 psi/sec  
Lower Explosive Limit: 0.08 g/L

Statement of Hazard: May be ignited by heat or open flame. Fine dust dispersed in air (particularly in confined spaces) may ignite if exposed to high temperature ignition source. Use only with adequate ventilation.

Fire Fighting/Extinguishing Media: On fire, use multi-purpose dry powder or water spray. Cool exposed containers with water. If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Wear self-contained breathing apparatus and appropriate protective equipment for fire fighting and cleanup...see SECTION II - HEALTH HAZARDS.

### SECTION IV - REACTIVITY

Under Normal Conditions: Stable; decomposes on heating.  
Hazardous Decomposition Product(s): n-Butylisocyanate, a strong lachrymator

### SECTION V - TRANSPORTATION, STORAGE AND DISPOSAL

Transportation: Not regulated under D.O.T.

Storage: Keep out of reach of children. Keep away from fire and sparks. Never allow "Benlate" to become wet during storage. This may lead to certain chemical changes which will reduce the effectiveness of "Benlate" as a fungicide. Keep container tightly closed when not in use. Do not contaminate water, food, or feeds by storage.

Pesticide Disposal: Pesticide, spray mixture or rinsate that cannot be used according to label instructions must be disposed of according to Federal, state or local procedures under the Resource Conservation and Recovery Act. Do not contaminate water, food, or feeds by disposal.

Container Disposal: Do not re-use container; dispose of according to approved Federal, state or local procedures under the Resource Conservation and Recovery Act.

Special Precautions: This product is toxic to fish. Keep out of streams or ponds. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated.

### SECTION VI - SPECIAL PROTECTION INFORMATION

Personal Protective Equipment: Where dust levels may exceed AEL value, an approved pesticide respirator, goggles, and protective clothing should be worn.