

## Material Safety Data Sheet

## EMERGENCY

FOR CHEMICAL EMERGENCY: SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CALL  
CHEMTREC - DAY or NIGHT - (800) 424-9300

Product Name:

**AB NAVIGATE**

EPA Reg. No. 228-378-8959

## SECTION I - GENERAL INFORMATION

Manufacturer's Name:

APPLIED BIOCHEMISTS  
W175 N11163 Stonewood Drive  
Suite 234  
Germantown, WI 53022-4799  
(800) 558-5106

Trade Name &amp; Synonyms:

**AB NAVIGATE**

Chemical Name &amp; Synonyms:

2,4-D: 2,4-DICHLOROPHENOXYACETIC ACID, BUTOXYETHYL  
ESTER

Generic Description:

AQUATIC HERBICIDE

Formula:

 $C_{12}H_{18}Cl_2O_4$ 

D.O.T. Proper Shipping Name:

Not Regulated

U.N. or N.A. Identification #:

Not Regulated

D.O.T. Hazard Class:

Not Applicable

D.O.T. Emergency Response Guide:

Not Assigned

Hazardous Mat'l's ID System Values (HMIS):

Health -1

Flammability -1

Reactivity -0

Personal Protection -F

Nat'l Fire Protection Assn. (NFPA 704M):

Health -1

Flammability -1

Reactivity -0

Specific Hazard: None

## SECTION II - HAZARDOUS INGREDIENTS

Hazardous Component(s)	CAS#	PEL	TLV
2,4-Dichlorophenoxyacetate			
Acid, Butoxyethyl Ester	1929-73-3	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Crystalline Silica	14808-60-7	0.1 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>

Ingredients listed in this section have been determined to be hazardous as defined in 29 CFR 1910.1200. Materials determined to be health hazards are listed if they comprise 1% or more of the composition. Materials identified as carcinogens are listed if they comprise 0.1% or more of the composition. Information on proprietary materials is available as provided in 29 CFR 1910.1200 (i) (1).

## SECTION III - PHYSICAL DATA

Boiling Point (F):	NOT KNOWN	Specific Gravity (water = 1):	NOT KNOWN
Vapor Pressure (mm Hg):	NOT KNOWN	% Volatile (by Volume):	NOT DETERMINED
Vapor Density (air = 1):	NOT KNOWN	Evaporation Rate:( Ether = 1)	< 1
Melting Point (F):	NOT KNOWN		
Solubility in Water:	INSOLUBLE		
Appearance & Odor:	GRAY/TAN GRANULES WITH MILD PHENOLIC ODOR.		

## SECTION IV - FIRE &amp; EXPLOSION DATA

Flash Point (F):	NOT FLAMMABLE	Method:	
Extinguishing Media:	CO <sub>2</sub> , WATER, DRY CHEMICAL OR FOAM TO FIGHT FIRES IN WHICH THIS PRODUCT IS INVOLVED.		
Special Fire Fighting Procedures:	WEAR APPROVED SELF-CONTAINED BREATHING APPARATUS. DIKE TO PREVENT CONTAMINATION OF WATER SOURCES.		
Unusual Fire & Explosion Hazards:	THERMAL DECOMPOSITION PRODUCTS INCLUDE OXIDES OF CARBON, SULFUR DIOXIDES AND HYDROCHLORIC ACID.		

## SECTION V - REACTIVITY DATA

Stability -	Unstable	<u> X </u> Stable
Conditions to Avoid:	NONE KNOWN	
Incompatibility (Materials to Avoid):	ACIDS, BASES, OXIDIZERS.	
Hazardous Decomposition Products:	THERMAL DECOMPOSITION PRODUCTS INCLUDE OXIDES OF CARBON, SULFUR DIOXIDES AND HYDROCHLORIC ACID.	
Hazardous Polymerization:	Will Occur	<u> X </u> Will Not Occur
Conditions to Avoid:	NONE	

