



MATERIAL SAFETY DATA SHEET

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

DI-83

HMIS CODES

Health 2
Flammability 3
Reactivity 1

PRODUCT NAME

Basecoat Jet Black

MANUFACTURER'S NAME

Distinctive Image
Dutch Square Industrial Park
6423 Amsterdam Way
Wilmington, NC 28405

EMERGENCY TELEPHONE NO.

CHEMTREC:
800-424-9300 (Within USA)
001-703-527-3887 (Outside the USA)
INFORMATION TELEPHONE NO.
(313) 531-1111

Section 2 -- COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient
% by weight

CAS Number

Vapor Pressure

N-Butanol

5 - 20%

71-36-3

6

ACGIH TLV TWA 20

ACGIH STEL

OSHA PEL 100

OSHA STEL

NIOSH REL-C: 50

NIOSH IDLH 1400

Methyl n-Amyl Ketone

5 - 20%

110-43-0

1.6

ACGIH TLV 50

ACGIH STEL N/E

OSHA PEL 100

OSHA STEL N/E

NIOSH REL 100 ppm

NIOSH REL 465 mg/m3

OSHA Z1 100 ppm

OSHA Z1 465 mg/m3

Aluminum Hydroxide

1 - 5%

21645-51-2

N/A

			ACGIH TLV	N/E
			ACGIH STEL	N/E
			OSHA PEL	N/E
			OSHA STEL	N/E
Titanium Dioxide				
20 - 50%	13463-67-7		N/A	
			ACGIH TLV	N/E
			ACGIH STEL	N/E
			OSHA PEL	N/E
			OSHA STEL	N/E
Petroleum Distillates, Hydrotreated Light				
1 - 5%	64742-47-8		5	
			ACGIH TLV	N/E
			ACGIH STEL	N/E
			OSHA PEL	N/E
			OSHA STEL	N/E
Silica, amorphous, precipitated and gel				
1 - 5%	112926-00-8		N/A	
			ACGIH TLV	N/E
			ACGIH STEL	N/E
			OSHA PEL	N/E
			OSHA STEL	N/E
Cellulose Acetate Butyrate				
5 - 20%	9004-36-8		N/A	
			ACGIH TLV	N/E
			ACGIH STEL	N/E
			OSHA PEL	N/E
			OSHA STEL	N/E
n-butyl Acetate				
20 - 50%	123-86-4		10	
			ACGIH TLV	150
			ACGIH STEL	200
			OSHA PEL	150
			OSHA STEL	N/E
			NIOSH	REL 150
			NIOSH	STEL 200
			NIOSH	IDLH 1700
parachlorobenzotrifluoride				
0.1 - 1%	98-56-6		7.62	
			ACGIH TLV	N/E
			ACGIH STEL	N/E
			OSHA PEL	N/E
			OSHA STEL	N/E
Tert Butyl Acetate				
1 - 5%	540-88-5		41.5	
			ACGIH TLV	200
			ACGIH STEL	N/E
			OSHA PEL	200
			OSHA STEL	N/E
			NIOSH	REL 200
			NIOSH	IDLH 1500

Section 3 -- HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE:

Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

EFFECTS OF OVEREXPOSURE:

Irritation of eyes, skin and upper respiratory system. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

SIGNS AND SYMPTOMS OF OVEREXPOSURE:

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists. Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

None generally recognized.

CANCER INFORMATION:

FOR COMPLETE DISCUSSION OF TOXICOLOGY DATA REFER TO SECTION 11.

Section 4 -- FIRST AID MEASURES

If INHALED:

If affected, remove from exposure. Restore breathing. Keep warm and quiet.

If on SKIN:

Wash affected area thoroughly with soap and water. Remove contaminated clothing and launder before re-use.

If in EYES:

Flush eyes with large amounts of water for 15 minutes. Get medical attention.

If SWALLOWED:

Do not induce vomiting. Get medical attention immediately.

Section 5 -- FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL
39 F	0.9	12.0

EXTINGUISHING MEDIA:

Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical, or universal aqueous film forming foam) designed to extinguish NFPA Class IB flammable

liquid fires. Water spray may be ineffective. Water spray may be used to cool closed containers to prevent pressure build-up and possible auto ignition or explosion when exposed to extreme heat.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES:

Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible auto ignition or explosion when exposed to extreme heat.

Section 6 -- ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Provide maximum ventilation. Only personnel equipped with proper respiratory, skin, and eye protection should be permitted in the area. Remove all sources of ignition. Take up spilled material with sand, vermiculite, or other noncombustible absorbent material and place in clean, empty containers for disposal. Only the spilled material and the absorbent should be placed in this container.

Section 7 -- HANDLING RELEASE MEASURES

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively. During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and other sources of ignition. Consult NFPA Code. Use approved bonding and grounding procedures. Do not expose to temperature above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children.

Section 8 -- EXPOSURE CONTROLS / PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE:

Use only with adequate ventilation. Avoid contact with skin and eyes. Avoid breathing vapor and spray mist. Wash hands after using. This coating may contain materials classified as nuisance particulates (listed "as Dust" in section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in section 2, the applicable limits for nuisance dust are ACGIII TLV 10 mg/m³ (total dust), 3 mg/m³ (respirable fraction), OSHA PEL 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction). Removal of old paint by sanding, scraping, or other means may generate dust or fumes that contain lead.

VENTILATION:

Local exhaust preferable. General exhaust acceptable if the exposure to materials in section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108, and complete an industrial hygiene study to analyze specific working conditions.



RESPIRATORY PROTECTION:

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in section 2. When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.



PROTECTIVE GLOVES:

None required for normal application of these products where minimal skin contact is expected. For prolonged repeated contact, wear chemical resistant gloves.



EYE PROTECTION:

Wear safety spectacles with unperforated side shields.

OTHER PRECAUTIONS:

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.



Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	10.412 lb/gal	1248 g/l
SPECIFIC GRAVITY	1.250	
BOILING POINT	208 - 277 F	
98 - 136 C		
VOLATILES	47.9 % by wt	70.5 % by vol
EVAPORATION RATE	Same as ether	
VAPOR DENSITY	Heavier than air	
REGULATORY VOC	4.75 lb/gal	569 g/l
ACTUAL VOC	4.36 lb/gal	522 g/l

Section 10 -- STABILITY AND REACTIVITY

STABILITY:

This product is normally stable and will not undergo hazardous reactions.

CONDITIONS TO AVOID:

None Known.

INCOMPATIBILITY:

Avoid contact with strong alkalis, strong mineral acids, or strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon monoxide, carbon dioxide, oxides of sulfur, oxides of barium, lowers molecular weight polymer fractions.

HAZARDOUS POLYMERIZATION:

None Known.

Section 11 -- TOXICOLOGICAL INFORMATION

CAS No. Ingredient Name

71-36-3 N-Butanol

IARC Classification Not Established

Acute oral toxicity:
LD50 rat: 790 mg/kg

Acute inhalation toxicity:
No data available

Acute dermal toxicity:
LD50 rabbit: 3,400 mg/kg

110-43-0 Methyl n-Amyl Ketone

IARC Classification Not Established

Acute oral toxicity:
No data available

Acute inhalation toxicity:
LCLo Rat: 4,000 PPM; 4 h
LCLo Rat: 4,000 mg/l; 4 h

Acute dermal toxicity:
No data available

21645-51-2 Aluminum Hydroxide

IARC Classification Not Established

Routes of Entry: Inhalation, Ingestion

Toxicity to Animals: LD50: Not available. LC50: Not available

Chronic Effects on Human: Not Available

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available

Special remarks on Chronic Effects on Humans: Not available

Special Remarks on other Toxic Effects on Humans: Acute Potential Health Effects: May cause mild skin, eye and upper respiratory tract irritation. Ingestion: May cause gastrointestinal tract irritation: May affect bones (osteomalacia), metabolism, blood, behavior (muscle concentration, spasticity, change in motor activity), liver.

13463-67-7 Titanium Dioxide

IARC Classification Group 2B
No data available.

64742-47-8 Petroleum Distillates, Hydrotreated Light

IARC Classification Not Established

RTECS#:

CAS# 64742-47-8: OA5504000

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 64742-47-8:

ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans (as total hydr

Epidemiology: No data available.

Teratogenicity: No data available.

Reproductive Effects: No data available.

Neurotoxicity: No data available.

Mutagenicity: No data available.

Other Studies: No data available.

112926-00-8 Silica, amorphous, precipitated and gel

IARC Classification Not Established
No Data Available

9004-36-8 Cellulose Acetate Butyrate

IARC Classification Not Established

Information on likely routes of exposure

Inhalation: None Known

Ingestion: None Known

Skin Contact: Molten material will produce thermal burns

Eye Contact: Molten material will produce thermal burns

Information on toxicological effects

Acute Toxicity

Oral

Product: No data available

Specified substance(s)

Cellulose acetate butyrate: Oral LD-50: (Rat):>3,200 mg/kg (highest dose tested)

Dermal

Product: No data available

Specified substance(s)

Cellulose acetate butyrate: Dermal LD-50: (Guinea pig):>1,000 mg/kg (highest dose tested)

Inhalation

Product: No data available

Specified substances(s)

Cellulose acetate butyrate: No data available

Repeated dose toxicity

Product: No data available

Specified substance(s)

Cellulose acetate butyrate: No data available

Skin corrosion/irritation

Product: No data available

Specified substance(s)

Cellulose acetate butyrate: (Guinea pig, 24 h): slight

Serious eye damage/eye irritation

Product: No data available

Specified substance(s)

Cellulose acetate butyrate: No data available

Respiratory or skin sensitization

Product: No data available

Specified substance(s)

Cellulose acetate butyrate: No data available

Germ cell mutagenicity

In vitro

Product: No data available

Specified substance(s)
Cellulose acetate butyrate: No data available

In vivo
Product: No data available

Specified substance(s)
Cellulose acetate butyrate: No data available

Carcinogenicity
Product: No data available

Specified substance(s)
Cellulose acetate butyrate: No data available

Reproductive toxicity
Product: No data available

Specified substance(s)
Cellulose acetate butyrate: No data available

Specific target organ toxicity-single exposure
Product: No data available

Specified substance(s)
Cellulose acetate butyrate: No data available

Specific target organ toxicity-repeated exposure
Product: No data available

Specified substance(s)
Cellulose acetate butyrate: No data available

Aspiration hazard
Product: No data available

Specified substance(s)
Cellulose acetate butyrate: No data available

Other adverse effects: No data available

123-86-4 n-butyl Acetate

IARC Classification	Not Established
Acute oral toxicity:	LD50 Rat: 10.8 g/kg
Acute inhalation toxicity:	LC50 Rat: 160mh/l, 4h
Acute dermal toxicity:	LD50 Rabbit: 17,600 mg/kg

98-56-6

parachlorobenzotrifluoride

IARC Classification Not Established

Acute oral toxicity-

No data available

Acute oral toxicity- Components

p-Trifluoromethylphenyl chloride:

LD50: 13,000 mg/kg

Species: Rat

Acute inhalation toxicity-

No data available

Acute inhalation toxicity- Components

p-Trifluoromethylphenyl chloride:

LD50: 33 mg/l

Exposed time: 4 h

Species: Rat

Acute dermal toxicity-

No data available

Acute toxicity (other routes of administration)-

No data available

540-88-5

Tert Butyl Acetate

IARC Classification Not Established

T-Butyl acetate is only slightly toxic following acute inhalation, oral, or dermal exposure. Ingestion or inhalation of high doses may cause CNS depression. It is a very slight skin and moderate eye irritant. It is not a sensitizer, nor a genotoxic agent. Studies in animals indicate that t-butyl acetate is not a developmental or reproductive toxicant. Repeated inhalation exposure studies in animals indicate that t-butyl acetate may cause transient behavioral changes, increased liver, adrenal, and kidney weights, and possible kidney changes. However, the types of kidney changes observed are unique to the male rat kidney. There are no carcinogenicity data for t-butyl acetate. The primary metabolite of t-butyl acetate, t-butanol, is an animal carcinogen.

Acute toxicity

LC50 (vapor) rat 4211 PPM 6 HOURS

LD50 (Oral) rat 4500 MG/KG BWT

LD50 (Skin) rabbit > 2000 MG/KG BWT

Acute effects

Inhalation: Vapors or aerosol may cause irritation of the eyes, nose and throat as well as CNS depression (fatigue, dizziness, loss of concentration, with collapse, coma and death possible in cases of severe overexposure). Inhalation of airborne droplets may cause irritation of the respiratory tract.

Ingestion: May cause CNS depression, gastric discomfort, and vomiting. This material is an aspiration hazard.

Skin contact: No systemic toxicity is expected from acute dermal exposure.

Irritation: Skin-Not a skin irritant.

Eyes: No eye irritation

Sensitization: Does not induce skin sensitization. Repeated dose toxicity: Inhalation repeated exposure studies demonstrated target organ effects in male rats (kidney) by a mechanism of action that is not relevant to humans and in mice (nervous system) transient behavioral changes that were observed immediately after exposure.

Reproductive effects: This substance is not toxic to reproduction. The reproductive toxicity of t-butyl acetate has been investigated in rats via the inhalation route. There were no adverse effects on reproductive performance or sperm number or quality at 1600 ppm, the highest exposure level tested. In addition, no gross or histopathologic effects were observed in the reproductive organs of male and female rats or mice exposed at 1600 ppm for 90 days in a repeat-exposure toxicity study conducted via inhalation and there was no adverse effect on estrous cycle length in mice.

Developmental Toxicity: This substance is not a developmental toxicant. It did not cause maternal toxicity and any embryo/fetal toxicity or developmental abnormalities were observed in the offspring of animals following inhalation exposures of 1600 ppm.

Genetic Toxicity: Negative for genotoxicity using both in vitro and in vivo tests.

Carcinogenicity: Specific data not available. T-Butanol, the primary metabolite of t-butyl acetate, is an animal carcinogen. In a drinking water study, t-butanol induced benign kidney tumors in male rats via an α -2u-globulin mode of action, a tumor mechanism not relevant to humans. In female mice, there was an increased incidence of benign thyroid tumors, a tumor mechanism that most likely is not relevant to humans. This substance is not classified for carcinogenicity by IARC, OSHA, TP, or the EPA.

Acute toxicity: Rat 3046 MG/KG BWT rabbit > 2000 MG/KG BWT

Target organs: Thyroid, thymus, skin, eyes, respiratory system, central nervous system, kidney, liver and blood.

Repeated dose toxicity: Oral and inhalation repeated exposure studies demonstrated target organ effects in male rats (kidney) and male and female mice (thyroid) by mechanisms of action that are not relevant to humans.

Reproductive effects: T-Butanol had no effect on fertility in a one-generation screening study in rats. At maternally toxic doses (1000 mg/kg bwt/day), there were fewer live pups per litter and lower pup body weights which continued through lactation. No adverse effects on testes and ovary structure, or on sperm motility or morphology, were seen in rats or mice that received repeated high oral doses (up to approx. 3600 mg/kg bwt/day in rats, 8210 mg/kg bwt/day in male mice and 11,620 mg/kg bwt/day in female mice).

Developmental Toxicity: Results from studies in pregnant rats and mice indicate that t-butanol is not teratogenic but at high oral doses (1000 mg/kg bwt) produces embryo/fetotoxicity and developmental delay. Developmental delay was also observed in rats exposed by inhalation during gestation to t-butanol at 2000 ppm (6063 mg/m³), in the presence of maternal toxicity (reduction in body weight, CNS effects).

Genetic Toxicity: Negative for genotoxicity using both in vitro and in vivo tests.

Carcinogenicity: T-Butanol is an animal carcinogen. In a drinking water study, t-butanol induced benign kidney tumors in male rats via an α -2uglobulin mode of action, a tumor mechanism not relevant to humans. In female mice, there was an increased incidence of benign thyroid tumors, a tumor mechanism that most likely is not relevant to humans. T-Butanol is not classified as to carcinogenicity by EPA, OSHA, NTP or IARC.

IARC Reference

IARC Group 1: The agent is *carcinogenic to humans*

This category is used when there is *sufficient evidence of carcinogenicity* in humans. Exceptionally, an agent may be placed in this category when evidence of carcinogenicity in humans is less than

sufficient but there is *sufficient evidence of carcinogenicity* in experimental animals and strong evidence in exposed humans that the agent acts through a relevant mechanism of carcinogenicity.

IARC Group 2A: The agent is *probably carcinogenic to humans*.

This category is used when there is *limited evidence of carcinogenicity* in humans and *sufficient evidence of carcinogenicity* in experimental animals. In some cases, an agent may be classified in this category when there is *inadequate evidence of carcinogenicity* in humans and *sufficient evidence of carcinogenicity* in experimental animals and strong evidence that the carcinogenesis is mediated by a mechanism that also operates in humans. Exceptionally, an agent may be classified in this category solely on the basis of *limited evidence of carcinogenicity* in humans. An agent may be assigned to this category if it clearly belongs, based on mechanistic considerations, to a class of agents for which one or more members have been classified in Group 1 or Group 2A.

IARC Group 2B: The agent is *possibly carcinogenic to humans*.

This category is used for agents for which there is *limited evidence of carcinogenicity* in humans and less than *sufficient evidence of carcinogenicity* in experimental animals. It may also be used when there is *inadequate evidence of carcinogenicity* in humans but there is *sufficient evidence of carcinogenicity* in experimental animals. In some instances, an agent for which there is *inadequate evidence of carcinogenicity* in humans and less than *sufficient evidence of carcinogenicity* in experimental animals together with supporting evidence from mechanistic and other relevant data may be placed in this group. An agent may be classified in this category solely on the basis of strong evidence from mechanistic and other relevant data.

IARC Group 3: The agent is *not classifiable as to its carcinogenicity to humans*.

This category is used most commonly for agents for which the evidence of carcinogenicity is *inadequate* in humans and *inadequate* or *limited* in experimental animals. Exceptionally, agents for which the evidence of carcinogenicity is *inadequate* in humans but *sufficient* in experimental animals may be placed in this category when there is strong evidence that the mechanism of carcinogenicity in experimental animals does not operate in humans. Agents that do not fall into any other group are also placed in this category. An evaluation in Group 3 is not a determination of non-carcinogenicity or overall safety. It often means that further research is needed, especially when exposures are widespread or the cancer data are consistent with differing interpretations.

IARC Group 4: The agent is *probably not carcinogenic to humans*.

This category is used for agents for which there is *evidence suggesting lack of carcinogenicity* in humans and in experimental animals. In some instances, agents for which there is *inadequate evidence of carcinogenicity* in humans but *evidence suggesting lack of carcinogenicity* in experimental animals, consistently and strongly supported by a broad range of mechanistic and other relevant data, may be classified in this group.

Section 12 -- ECOLOGICAL INFORMATION

CAS No. Ingredient Name

71-36-3 N-Butanol

No data available.

110-43-0 Methyl n-Amyl Ketone

No data available.

21645-51-2 Aluminum Hydroxide

Ecotoxicity: Not available

BOD5 and COD: Not available

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: This product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available

13463-67-7 Titanium Dioxide

Ecotoxicity:

Daphnia: Daphnia: LC50 = 32-32.5 mg/L; 30D;
EC50 Bacteria: EC50 = 5 g/L

Pseudomonas fluorescens: EC50 = > 10000 mg/L / 24H

Pseudomonas fluorescens: EC50 = > 5000 mg/L / 24H

Fish:

Phoxinus phoxinus: LC50 = > 1000 mg/L / 30D

Coregonus autumnalis migratorius G: LC50 = 3mg/L / 30D

Cyprinodon variegatus: LC50 = <370 >240 mg/L / 96H

Opossum shrimp: Mysidopsis almyra: LC50 = <400 >300 mg/L / 96H

Environmental: No information available.

Physical: No information available.

Other: No information available.

64742-47-8 Petroleum Distillates, Hydrotreated Light

No information available.

112926-00-8 Silica, amorphous, precipitated and gel

No Data Available

9004-36-8 Cellulose Acetate Butyrate

No data available.

123-86-4 n-butyl Acetate

Aquatic toxicity:

Acute and Prolonged Toxicity to Fish: No data available

Acute Toxicity to Aquatic Invertebrates: No data available

Environmental fate and pathways: No data available

98-56-6 parachlorobenzotriflouride

Biodegradability- Product:

64% Test substance: 1-chloro-4-(trifluoromethyl)benzene

Biodegradability- Components

p-Trifluoromethylphenyl chloride:

Anaerobic 64%

Bioaccumulation- Product:

No data available

Ecotoxicity effects

Toxicity to fish- Product:

No data available

Toxicity to fish- Components

p-Trifluoromethylphenyl chloride:

LC50: 5.6 mg/l

Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates- Product:

No data available

Toxicity to daphnia and other aquatic invertebrates- Components

p-Trifluoromethylphenyl chloride

Remarks:

No data available

Toxicity to algae- Product:

No data available

Toxicity to algae- Components

p-Trifluoromethylphenyl chloride

Remarks:

No data available

Toxicity to bacteria- Product:

No data available

540-88-5

Tert Butyl Acetate

Ecotoxicity

Acute Fish toxicity: LC50 / 96 HOURS *Oncorhynchus mykiss* 240 mg/l

Summary: Acute toxicity to fish is low.

Acute toxicity to aquatic invertebrates: EC50 / 48 HOURS *Daphnia magna*. 350 mg/l

Summary: Low acute toxicity to aquatic invertebrates.

Toxicity to aquatic plants EC50 / 96 HOURS *Pseudokirchneriella subcapitata* 64 mg/l

Summary: Low toxicity to algae.

Toxicity to microorganisms EC3 / 16 HOURS *Pseudomonas putida* 78 mg/l

Summary: Low toxicity to bacteria. EC3 / 72 HOURS *Entosiphon sulcatum* 970 mg/l

Chronic toxicity to fish

Summary: No Data Available.

Chronic toxicity to aquatic invertebrates

Summary: No Data Available.

Other adverse effects: Expected to show low toxicity to higher plants.

Environmental fate and pathways

Expected to be emitted and partition predominantly to the atmosphere. Accidental releases to water or soil are expected to evaporate and undergo atmospheric decomposition processes.

Mobility

Behavior in environmental compartments: Released material would be expected to show high soil mobility and to volatilize readily from soil and surface waters, forming atmospheric vapor.

Persistence and degradability

Biodegradation: Expected to hydrolyze slowly in water (half-life ca. 0.5 years or longer). Atmospheric vapors expected to be photo chemically degraded by reaction with hydroxyl radicals (half-life 19.7 days):

Inherently biodegradable.

Bioaccumulation: Bioconcentration factor (BCF) 5.61 ((QSAR calculated value)) this material is not expected to bio accumulate.

Other adverse effects

This material is not considered persistent by EPA, and is not expected to contribute to the greenhouse gas effect, stratospheric ozone depletion, tropospheric ozone formation, or particulate matter formation.

Tert-Butyl Alcohol 75-65-0

Ecotoxicity

This material is expected to be non-hazardous to aquatic species.

Acute Fish toxicity / 96 HOUR *Pimephales promelas* (fathead minnow) > 961 mg/l

Summary: This material is not harmful or toxic to fish.

Acute toxicity to aquatic invertebrates / 48 HOURS *Daphnia magna* (Water flea) 933 mg/l

Summary: Low acute toxicity to aquatic invertebrates.

Toxicity to aquatic plants *Pseudokirchneriella subcapitata* 976 mg/l

Summary: Acute toxicity to aquatic plants very low.

Toxicity to microorganisms *Pseudomonas putida* 10,000 mg/l

Chronic toxicity to fish *Clarias Gariepinus* 332 mg/l

Chronic toxicity to aquatic invertebrates

Summary: study scientifically unjustified

Other adverse effects

Raphanus sativus, 50% reduction in seedling length, 160 ppm

Environmental fate and pathways

Mobility

Behavior in environmental compartments: Highly mobile in soil and likely to volatilize from moist or dry soil surfaces. Expected to volatilize from surface waters and not likely to adsorb to suspended solids and sediment in water.

Persistence and degradability

Biodegradation: Predicted to be inherently bio degradable- Degraded in the atmosphere by reaction with photo chemically produced hydroxyl radicals with an estimated half- life of 75.9 hours.

Bioaccumulation: Bioaccumulation is unlikely.

Section 13 -- DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

Section 14 -- TRANSPORT INFORMATION

Proper Shipping Name: Consumer Commodity
NOS Technical Name: ORM-D
Hazard Class: N/A
UN Number: N/A
Packing Group: N/A

Section 15 -- REGULATORY INFORMATION

Canadian Regulations:

CEPA (Canadian Environmental Protection Act): <

All substances in this product are listed on the Canadian Domestic Substance List (DSL) or are not required to be listed.

US Regulations:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

SARA 313:

CAS No.	CHEMICAL/COMPOUND	% by WT
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71-36-3	N-Butanol	5.0
540-88-5	Tert Butyl Acetate	
5.0		

PROP 65

CAS No.	CHEMICAL COMPOUND	% by WT
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None

TSCA CERTIFICATION:

U.S. TSCA: This product and/or all of its components are listed on the U.S. TSCA Inventory or is otherwise exempt from TSCA Inventory reporting requirements.

Section 16 -- OTHER INFORMATION

DISCLAIMER:

Do not handle until the manufacturer's safety precautions have been read and understood. Regulations require that all employees be trained on Material Safety Data Sheets for all products with which they come in contact. While we believe that the data contained herein is accurate and derived from qualified sources, the data are not to be taken as a warranty or representation for which we assume legal responsibility. They are offered solely for your consideration, investigation, and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state, provincial, and local laws and regulations.