



MATERIAL SAFETY DATA SHEET

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
DI-791

HMIS CODES
Health 3
Flammability 4
Reactivity 1

PRODUCT NAME
High Build Primer Gray

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

<u>Ingredient</u> <u>% by weight</u>	<u>CAS Number</u>	<u>Vapor Pressure</u>	
Dimethyl Ether 20 - 50%	115-10-6	ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	N/E
		OSHA STEL	N/E
Xylene 5 - 20%	1330-20-7	8	
		ACGIH TLV	100
		ACGIH STEL	150
		OSHA PEL	100
		OSHA STEL	
		NIOSH	STEL 150
		NIOSH	REL 100
Ethylbenzene 1 - 5%	100-41-4	7	
		ACGIH TLV	100

		ACGIH STEL	125
		OSHA PEL	100
		OSHA STEL	N/E
		NIOSH	REL 100
		NIOSH	STEL 125
		NIOSH	IDLH 800
Propylene Glycol Monomethyl			
0.1 - 1%	108-65-6	3.8	
		ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	N/E
		OSHA STEL	N/E
Toluene			
5 - 20%	108-88-3	21	
		ACGIH TLV	20
		ACGIH STEL	
		OSHA PEL	200
		OSHA STEL	300
		NIOSH	100
		NIOSH	STEL 150
		NIOSH	IDLH 500
1, 2, 4-Trimethylbenzene			
1 - 5%	95-63-6	N/A	
		ACGIH TLV	25
		ACGIH STEL	N/E
		OSHA PEL	N/E
		OSHA STEL	N/E
		NIOSH	25
Acetone			
1 - 5%	67-64-1	231	
		ACGIH TLV	500 ppm
		ACGIH STEL	750 ppm
		OSHA PEL	1000
		OSHA STEL	N/E
		NIOSH	REL 250 ppm
		NIOSH	REL 590 mg/m3
		NIOSH	IDLH 2500
Aluminum Hydroxide			
0.1 - 1%	21645-51-2	N/A	
		ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	N/E
		OSHA STEL	N/E
Titanium Dioxide			
5 - 20%	13463-67-7	N/A	
		ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	N/E
		OSHA STEL	N/E
Carbon Black			
0.1 - 1%	1333-86-4	N/A	
		ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	N/E
		OSHA STEL	N/E
Talc			
5 - 20%	14807-96-6	N/A	
		ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	N/E
		OSHA STEL	N/E

Isopropyl Benzene				
0.1 - 1%	98-82-8	8		
		ACGIH TLV	50	
		ACGIH STEL	N/E	
		OSHA PEL	50	
		OSHA STEL	N/E	
		NIOSH	50	
		NIOSH	IDLH: 900	
Trimethyl Benzene				
1 - 5%	25551-13-7	N/E		
		ACGIH TLV	25	
		ACGIH STEL	N/E	
		OSHA PEL	N/E	
		OSHA STEL	N/E	
Amorphous Silica				
0.1 - 1%	7631-86-9	N/A		
		ACGIH TLV	N/E	
		ACGIH STEL	N/E	
		OSHA PEL	N/E	
		OSHA STEL	N/E	
Solvent Naphtha, petroleum, light aromatic				
1 - 5%	64742-95-6	6		
		ACGIH TLV	N/E	
		ACGIH STEL	N/E	
		OSHA PEL	N/E	
		OSHA STEL	N/E	
Chlorite-group minerals				
0.1 - 1%	1318-59-8	N/A		
		ACGIH TLV	N/E	
		ACGIH STEL	N/E	
		OSHA PEL	N/E	
		OSHA STEL	N/E	
Silicon dioxide				
0.1 - 1%	112945-52-5	N/A		
		ACGIH TLV	N/E	
		ACGIH STEL	N/E	
		OSHA PEL	N/E	
		OSHA STEL	N/E	
Tert Butyl Acetate				
5 - 20%	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	
Dibutyl Phthalate				
0.1 - 1%	84-74-2	0.00007		
		ACGIH TLV	N/E	
		ACGIH STEL	N/E	
		OSHA PEL	N/E	
		OSHA STEL	N/E	

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
-42 F	0.5	27.0

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	7.476 lb/gal	896 g/l
SPECIFIC GRAVITY	0.900	
BOILING POINT	-12 - 645 F	
-24 - 341 C		
VOLATILES	73.3 % by wt	86.3 % by vol
EVAPORATION RATE	Same as ether	
VAPOR DENSITY	Heavier than air	
REGULATORY VOC	5.22 lb/gal	626 g/l
ACTUAL VOC	4.45 lb/gal	533 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

115-10-6 Dimethyl Ether

IARC Classification Not Established

1330-20-7 Xylene

IARC Classification Group 3

Acute oral toxicity: LD50 Rat: 4.300 mg/kg

Acute inhalation toxicity: No data available

Acute dermal toxicity: LD50 Rabbit: (>) 2,000 mg/kg

100-41-4 Ethylbenzene

IARC Classification Group 2B

This is an example of pre-defined notes. Toxicological Information:

Draize test, rabbit, eye: 500 mg Severe;

Inhalation, mouse: LC50 = 35500 mg/m³/2H;

Inhalation, rat: LC50 = 55000 mg/m³/2H;

Oral, rat: LD50 = 3500 mg/kg;

Oral, rat: LD50 = 3500 mg/kg;

Skin, rabbit: LD50 = 17800 uL/kg;
Inhalation rat: LC50 = 17.2 mg/l/4H from BASF.
Carcinogenicity: Confirmed animal carcinogen with unknown relevance to humans
California: Carcinogen, initial date 6/11/04
NTP: Not listed.
IARC: Group 2B carcinogen
Epidemiology: No information found
Teratogenicity: No information found
Reproductive Effects: No information found
Mutagenicity: Mutation in mammalian somatic cells (Rodent, mouse) Lymphocyte = 80 mg/L.
Neurotoxicity: No information found
Other Studies: No information found

108-65-6 Propylene Glycol Monomethyl

IARC Classification Not Established

Acute toxicity

LD50 Oral:

Rat: 8,532 MG/KG BWT

LD50 Skin:

Rat: >5,000 MG/KG

Irritation:

Skin: May be irritating to the skin.

Eyes: May irritate eyes.

Target organs: Eyes, Skin.

Repeated dose toxicity:

No known chronic health effects.

108-88-3 Toluene

IARC Classification Group 3

Acute oral toxicity: LD50 rat: 2,600-7,500 mg/kg

Acute inhalation toxicity: LC50 rat: 8000 ppm, 4 h

Acute dermal toxicity: LD50 rabbit: 12,124 mg/kg

95-63-6 1, 2, 4-Trimethylbenzene

IARC Classification Not Established

LC50/LD50

Inhalation, rat: LC50 = 18000 mg/m³/4H;

Oral, mouse: LD50 = 6900 mg/kg;

Oral, rat: LD50 = 5 gm/kg;

Carcinogenicity:

CAS# 95-63-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: Workers exposed to a mixture of trimethylbenzenes at up to 60 ppm experienced CNS changes, asthmatic bronchitis, and blood dyscrasias.

Contamination of the solvent with benzene was probably responsible for the blood abnormalities.

Teratogenicity: No information available.

Reproductive Effects: No information found

Mutagenicity: CAS# 95-63-6: Sister Chromatid Exchange: Intraperitoneal, mouse = 900 mg/kg.

Neurotoxicity: No information found

67-64-1 Acetone

IARC Classification Not Established

LD50/LC50:

CAS# 67-64-1:

Dermal, guinea pig: LD50 = >9400 uL/kg;

Draize test, rabbit, eye: 20 mg Severe;

Draize test, rabbit, eye: 20 mg/24H Moderate;

Draize test, rabbit, eye: 10 uL Mild;

Draize test, rabbit, skin: 500 mg/24H Mild;

Inhalation, mouse: LC50 = 44 gm/m³/4H;

Inhalation, rat: LC50 = 50100 mg/m³/8H;

Oral, mouse: LD50 = 3 gm/kg;

Oral, rabbit: LD50 = 5340 mg/kg;

Oral, rat: LD50 = 5800 mg/kg;

Carcinogenicity:

CAS# 67-64-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: In a series of studies, no statistically significant differences in causes of death or clinical laboratory results were observed in 948 employees exposed to up to 1070 ppm acetone over 23 years.

Teratogenicity: Animal studies have only shown harmful effects in the offspring of animals exposed to doses which also produced significant maternal toxicity.

Reproductive Effects: During the Stewart et al. study: four adult female volunteers were exposed 7.5 hours to acetone vapor at a nominal concentration of 1000 ppm. Three of the four women experienced premature menstrual periods which were attributed to the acetone exposure.

Mutagenicity: Sex chromosome loss and nondisjunction (Yeast - *Saccharomyces cerevisiae*) = 47600 ppm; Cytogenetic analysis (Rodent - hamster Fibroblast) = 40 gm/L.

Neurotoxicity: No information found

Other Studies: No information found

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.

1333-86-4 Carbon Black

IARC Classification Group 2B

RTECS#:

CAS# 1333-86-4: FF5800000

LD50/LC50:

CAS# 1333-86-4:

Oral, rat: LD50 = >15400 mg/kg;

Skin, rabbit: LD50 = >3 gm/kg;

Carcinogenicity:

CAS# 1333-86-4:

1 ACGIH: Not listed.

1 California: carcinogen, initial date 2/21/03 (airborne, unbound particles of respirable size

1 NTP: Not listed.

1 IARC: Group 2B carcinogen

Epidemiology: No data available.

Teratogenicity: No information found

Reproductive Effects: No information found

Mutagenicity: See actual entry in RTECS for complete information.

Neurotoxicity: No information found

Other Studies: No information found

14807-96-6 Talc

IARC Classification Group 2B

Acute toxicity

Oral LD50

No data available

Inhalation LC50

Dermal LD50

No data available

Other information on acute toxicity

No data available

Skin corrosion/irritation

Skin - Human - Mild skin irritation - 3 h

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

Carcinogenicity - rat - Inhalation

Tumorigenic: Carcinogenic by RTECS criteria. Lungs, Thorax, or Respiration: Bronchiogenic carcinoma.

Endocrine: Tumors.

Carcinogenicity - rat - Inhalation

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Tumors.

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrous magnesium silicate)

1 - Group 1: Carcinogenic to humans (Hydrous magnesium silicate)

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrous magnesium silicate)

1 - Group 1: Carcinogenic to humans (Hydrous magnesium silicate)

NTP: No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

Teratogenicity

No data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

No data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No data available

Aspiration hazard

No data available

Potential health effects

Inhalation: Toxic if inhaled- May cause respiratory tract irritation.

Ingestion: May be harmful if swallowed.

Skin: May be harmful if absorbed through skin- May cause skin irritation.

Eyes: May cause eye irritation.

Signs and Symptoms of Exposure

Prolonged inhalation of crystalline silica may result in silicosis, a disabling pulmonary fibrosis characterized by fibrotic changes and miliary nodules in the lungs, a dry cough, shortness of breath, emphysema, decreased chest expansion, and increased susceptibility to tuberculosis.

Advanced stages; Loss of appetite, pleuritic pain, and total incapacity to work. Advanced silicosis may result in death due to cardiac failure or destruction of lung tissue. Crystalline silica is classified as group 1 "known to be carcinogenic to humans" by IARC and "sufficient evidence" of carcinogenicity by the NTP.,

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects

No data available

Additional Information

RTECS: WW2710000

98-82-8

Isopropyl Benzene

IARC Classification Group 2B

Routes of Entry: Dermal contact, Eye contact, Inhalation, Ingestion

Toxicity to Animals:

Acute oral toxicity (LD50): 1400 mg/kg [Rat].

Acute dermal toxicity (LD50): 12300 mg/kg [Rabbit].

Chronic Effects on Humans: The substance is toxic to lungs, the nervous system, mucous membranes

Other Toxic Effects on Humans: Very hazardous in case of skin contact (irritant, permeator), 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: Not available.

25551-13-7 Trimethyl Benzene

IARC Classification Not Established

Trimethyl benzene (mixed isomers), CAS-No.: 25551-13-7

Acute oral toxicity (LD-50 oral) 8,970 mg/kg (Rat)

7631-86-9 Amorphous Silica

IARC Classification Group 3

LD50/LC50:

CAS# 7631-86-9:

Draize test, rabbit, eye: 25 mg/24H Mild;

Carcinogenicity:

CAS# 7631-86-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: See carcinogenicity

Teratogenicity: No information available.

Reproductive Effects: No information available.

Mutagenicity: Please refer to RTECS for specific information.

Neurotoxicity: No information available.

Other Studies: No information available.

64742-95-6 Solvent Naphtha, petroleum, light aromatic

IARC Classification Not Established

Effects, Acute Exposure

Skin: Contact may irritate, drying

Skin Absorption slight; No toxic effects likely by this route

Eyes: Contact liquid mildly irritating; vapor irritating above 75ppm; will not damage

Inhalation: Irritating above 75ppm; high concentrations may cause headache, dizziness drowsiness

Ingestion: Headache, dizziness, drowsiness are possible; not a typical route of industrial exposure

Effects, Chronic Exposure

General prolonged exposure may cause dermatitis & skin cracking; "organic solvent syndrome" with fatigue, memory loss, tingling & numbness in limbs has been seen after long term exposure

Sensitizing: Not a sensitizer in humans or animals

Carcinogen/Tumorigen: Not considered a tumorigen or a carcinogen in humans or animals

Reproductive Effect: No known effect in humans or in animals without also causing maternal toxicity

Mutagen: No known effect on humans or in animals without also causing maternal toxicity

Synergistic with: Not known

LD50 (oral) 2900-3200mg/kg (rat), 8400mg/kg (rat)

LD50 (skin) >3160mg/kg (rabbit)

LC50 (inhalation) approx. 2900ppm (rat)

1318-59-8 Chlorite-group minerals

IARC Classification Not Established

Chemical Stability: Stable under normal conditions.

Chemical Stability: Conditions to Avoid: None.

Incompatibility: None identified.

Hazardous Decomposition: None identified.

Hazardous Polymerization: Will not occur.

112945-52-5 Silicon dioxide

IARC Classification Not Established

Product Acute oral toxicity: LD50 Rat: > 10000 mg/kg

Method: literature

Product Acute inhalation toxicity: LC50 Rat: 0.139 mg/l 4 h

Method: literature

(Maximum concentration attainable in experiments)

No deaths occurred.

Product Acute dermal toxicity: LD50 Rabbit: >5000 mg/kg

Method: literature

Product Skin irritation: Rabbit Not irritating.

Method: literature

Product Eye irritation: Rabbit Not irritating.

Method: literature

Product Repeated dose toxicity: Oral no negative effects.

Inhalation: No irreversible changes and no indication on silicosis.

Product Mutagenicity assessment: No evidence of mutagenic effects reported in literature.

Product Carcinogenicity: No negative effects.

Product Toxicity to reproduction: No negative effects.

Product Human experience: Silicosis or other specific illnesses of the respiratory tract have not been reported.

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 -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. T-Butanol is not classified as to carcinogenicity by EPA, OSHA, NTP or IARC.

84-74-2

Dibutyl Phthalate

IARC Classification Not Established

Information on likely routes of exposure

Inhalation: None known.

Ingestion: None known.

Skin contact: None known.

Eye contact: None known.

Acute Toxicity

Oral Product: No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

Oral LD-50: (Rat): > 2,000 mg/kg

Methyl butyl terephthalate

No data available.

Dermal Product:

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

Dermal LD-50: (Rat): > 2,000 mg/kg

Methyl butyl terephthalate

No data available.

Inhalation Product: No data available.

Specified substance(s)

Terephthalic acid, dibutyl

No data available.

Ester

Methyl butyl terephthalate

No data available.

Repeated dose toxicity

Product:

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

NOAEL (Rat, in feed, 90 d): 0.125 % Read-across from a similar material

NOAEL (Rat, by gavage, 90 d): 125 mg/kg Read-across from a similar material

Methyl butyl terephthalate

No data available.

Skin corrosion/irritation:

Product: No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

(Rabbit, 4 h): none

Methyl butyl terephthalate

No data available.

Serious eye damage/eye irritation:

Product: No data available

Specified substance(s)

Terephthalic acid, dibutyl ester

(Rabbit): slight

Methyl butyl terephthalate

No data available.

Respiratory or skin sensitization:

Product:

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

Skin Sensitization:, (Human) - non-sensitizing

Methyl butyl terephthalate

No data available.

Germ cell mutagenicity

In vitro

Product:

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

Mutagenicity - Bacterial, : negative +/- activation

Chromosomal aberration, : negative +/- activation

Mutagenicity - Mammalian, : negative +/- activation

Methyl butyl terephthalate

No data available.

In vivo

Product:

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

No data available.

Methyl butyl terephthalate

No data available.

Carcinogenicity

Specified substance(s)

Terephthalic acid, dibutyl ester

No data available.

Methyl butyl terephthalate

No data available.

Reproductive toxicity

Product:

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

No data available.

Methyl butyl terephthalate

No data available.

Specific target organ toxicity - single exposure

Product:

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

No data available.

Methyl butyl terephthalate

No data available.

Specific target organ toxicity - repeated exposure

Product:

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

No data available.

Methyl butyl terephthalate

No data available.

Aspiration hazard

Product:

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

No data available.

Methyl butyl terephthalate

No data available.

Other adverse effects:

No data available.

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

Ecotoxicity:

Fish: Rainbow trout:	LC50 = 14.0 mg/L; 96 Hr.;
Static Bioassay Fish: Fathead Minnow:	LC50 = 12.1 mg/L; 96 Hr.;
Flow-through Bioassay Fish: Bluegill/Sunfish:	LC50 = 150.0 mg/L; 96 Hr.;
Static Bioassay:	pH 6.5-7.9, 21-23 degrees C
Water flea:	EC50 = 2.1 mg/L; 48 Hr.;
Static Bioassay Water flea:	EC50 = 75.0 mg/L; 48 Hr.;
Static Bioassay Shrimp (mysidopsis bahia):	LC50 = 87.6 mg/L/96hr.
Sheepshead minnow:	LC50 = 275 mg/L/96hr.
Fathead minnow:	LC50 = 42.3 mg/L/96hr in hard water & 48.5 mg/L/96hr in soft water.

Environmental: Experimental data on the bioconcentration of ethylbenzene include a log BCF of 1.9 in goldfish and the log BCF of 0.67 for clams exposed to the water-soluble fraction of crude oil.

Using its octanol/water partition coefficient (log Kow= 3.15) and using a recommended regression equation, one can calculate a log BCF in fish of 2.16 indicating that ethylbenzene should not significantly bioconcentrate in aquatic organisms. Ethylbenzene has a moderate adsorption for soil.

The measured Koc for silt loam was 164

Physical: The predominant photochemical reaction of ethylbenzene in the atmosphere is with hydroxyl radicals; the tropospheric half-life for this reaction is 5.5 and 24 hr in the summer and winter, actively. Degradation is somewhat faster under photochemical smog situations.

Photo oxidation products which have been identified include ethylphenol, benzaldehyde, acetophenone and m- and p-ethylnitrobenzene. Ethylbenzene is resistant to hydrolysis.

Ethylbenzene does not significantly absorb light above 290 nm in methanol solution.

108-65-6 Propylene Glycol Monomethyl

Ecotoxicity:

No Data Available.

Acute Fish toxicity:

LC50/96 HOURS *Oryzias latipes* (Orange-red killifish) > 100 mg/l

NOEC/96 HOURS *Oryzias latipes* (Orange-red killifish) 556 mg/l

Acute toxicity to aquatic invertebrates

EC50/48 HOURS *Daphnia magna* (water flea) 373 mg/l

NOEC/48 HOURS *Daphnia magna* (water flea) 278 mg/l

Environmental fate and pathways:

It may enter soil and water.

Persistence and degradability:

Biodegradation: Expected to be biodegradable.

108-88-3 Toluene

Biodegradability: No data available

Bioaccumulation:

Species: ide, silver or golden orfe (Leuciscus idus)

Exposure time: 3 d

Dose: 0.05 mg/l

Bioconcentration factor (bcf): 94

Method: Not reported

Ecotoxicity effects:

Toxicity to fish:

96h LC50 rainbow trout, Donaldson trout (oncorhynchus mykiss): 5.80 mg/l

Method: Renewal

Mortality

96h LC50 fathead minnow (pimephales promelas): 12.60 mg/l

Method: Static

Mortality

Toxicity to daphnia and other aquatic invertebrates:

48 h EC50 water flea (daphnia magna): 6.00 mg/l

Method: Static intoxication

Toxicity to algae: No data available

Toxicity to bacteria: No data available

Biochemical oxygen demand (BOD): No data available

Chemical oxygen demand (COD): No data available

Additional ecological information: No data available

95-63-6 1, 2, 4-Trimethylbenzene

Ecotoxicity:

Fish: Fathead Minnow: LC50 = 77.2 mg/L; 96 Hr;

CAS# 95-63-6: Flow-through at 25 C (pH 7.24)

CAS# 95-63-6: Estimated Koc value = 720.

1, 2, 4-trimethylbenzene will have low mobility in soil. Volatilization from moist and dry soil surfaces is expected to occur. 1, 2, 4-Trimethylbenzene is expected to aerobically biodegrade in both soil and water. Anaerobic aquifer microcosms did not show significant biodegradation in comparison to poisoned controls. In water, 1, 2, 4-trimethylbenzene may adsorb to sediment or particulate matter.

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.

1333-86-4 Carbon Black

No information available.

14807-96-6 Talc

No data available.

98-82-8 Isopropyl Benzene

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: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

25551-13-7 Trimethyl Benzene

No data available.

7631-86-9 Amorphous Silica

No information available.

64742-95-6 Solvent Naphtha, petroleum, light aromatic

Bioaccumulation expected to be readily metabolized and not bio accumulate

Biodegradation expected to degrade readily and rapidly in the presence of oxygen; 72% over 20 days

Natural microbe populations need several weeks of acclimatization before they can metabolize some hydrocarbons effectively.

Abiotic Degradation many aromatic hydrocarbons are susceptible to both direct and indirect photolysis; the rate of degradation is unknown but ½ life in air likely to be in the range of 2040 hr

Mobility in soil, water expected to move slowly in soil and water

Aquatic Toxicity:

LC50 (Fish, 96hr) 41 & 45mg/liter (Pimephelas promelas), 2.34mg/liter (Oncorhynchus mykiss),

EC50 (Crustacea, 48hr) 0.95mg/liter (Daphnia magna)

EC50 (Algae) <1 & 2.5mg/liter (Skeletonema costatum)

1318-59-8 Chlorite-group minerals

No information available for this product.

112945-52-5 Silicon dioxide

Ecotoxicity effects

Toxicity to fish: LC50 (Brachydanio rerio): > 10,000 mg/l

96 H (Method: OECD 203)

Toxicity to daphnia: EC50 (Daphnia magna): > 10,000 mg/l

24 H (Method: OECD 202)

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.

84-74-2

Dibutyl Phthalate

Toxicity

Acute toxicity

Fish

Product:

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

NOEC: (Fish, 96 h): ≥ 0.17 mg/l (limit of solubility in fresh water)

Methyl butyl terephthalate

No data available.

Aquatic invertebrates

Product:

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

NOEC: (daphnia, 48 h): ≥ 0.16 mg/l (limit of solubility in fresh water)

Methyl butyl terephthalate

No data available.

Chronic Toxicity

Fish

Product:

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

NOEC: (Fish, 28 d): ≥ 0.024 mg/l (limit of solubility in fresh water)

Methyl butyl terephthalate

No data available.

Aquatic invertebrates

Product:

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

NOEC: (daphnia, 21 d): ≥ 0.050 mg/l (limit of solubility in fresh water)

Methyl butyl terephthalate

No data available.

Toxicity to Aquatic Plants

Product:

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

NOEC: 0.013 mg/l (limit of solubility in fresh water)

Methyl butyl terephthalate

No data available

Persistence and degradability

Biodegradation

Product:

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

76 % (28 d, Ready Biodegradability: CO2 Evolution Test) Readily biodegradable

Methyl butyl terephthalate

No data available.

Biological Oxygen Demand:

Product

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

No data available.

Methyl butyl terephthalate

No data available.

Chemical Oxygen Demand:

Product

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

No data available.

Persistence and degradability

Biodegradation

Product:

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

76 % (28 d, Ready Biodegradability: CO2 Evolution Test) Readily biodegradable

Methyl butyl terephthalate

No data available.

Biological Oxygen Demand:

Product

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

No data available.

Methyl butyl terephthalate

No data available.

Chemical Oxygen Demand:

Product

No data available.

Specified substance(s)

Terephthalic acid, dibutyl ester

No data available.

Other adverse effects: No data available.

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):

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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
1330-20-7	Xylene	5.3
100-41-4	Ethylbenzene	1.8
108-88-3	Toluene	12.0
95-63-6	1, 2, 4-Trimethylbenzene	1.4
67-64-1	Acetone	5.0

98-82-8	Isopropyl Benzene	0.2
540-88-5	Tert Butyl Acetate	8.7
84-74-2	Dibutyl Phthalate	0.9

PROP 65

CAS No.	CHEMICAL COMPOUND	% by WT
100-41-4	Ethylbenzene	1.8
108-88-3	Toluene	12.0
1333-86-4	Carbon Black	0.2
98-82-8	Isopropyl Benzene	0.2
84-74-2	Dibutyl Phthalate	0.9

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.