



MATERIAL SAFETY DATA SHEET

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

DI-801

HMIS CODES

Health 2
Flammability 3
Reactivity 1

PRODUCT NAME

HS White Toner

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>
Xylene		
1 - 5%	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
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
Trade Secret				
5 - 20%	NJTS50041NCD		N/A	
			ACGIH TLV	N/E
			ACGIH STEL	N/E
			OSHA PEL	N/E
			OSHA STEL	

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
70 F	1.0	7.1

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	12.891 lb/gal	1546 g/l
SPECIFIC GRAVITY	1.550	
BOILING POINT	281 - 281 F	
138 - 138 C		
VOLATILES	15.7 % by wt	31.9 % by vol
EVAPORATION RATE	Same as ether	
VAPOR DENSITY	Heavier than air	
REGULATORY VOC	2.02 lb/gal	243 g/l
ACTUAL VOC	2.02 lb/gal	243 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

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

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

NJTS50041NCD Trade Secret

IARC Classification Not Established
Skin irritation:

Rabbit: (Draize test)

Eye irritation:

Rabbit: non-irritant

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

1330-20-7 Xylene

Biodegradability: No data available

Bioaccumulation: No data available

Ecotoxicity effects:

Toxicity to fish: 96h LC50 Flathead minnow (*Pimephales promelas*); 23.53-29.97 mg/l

Method: Static

Mortality

Toxicity to daphnia and other aquatic Invertebrates: 24h LC50 Water flea (*Daphnia magna*): > 100.00 - <1,000.00 mg/l

Method: Static

Mortality

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

100-41-4 Ethylbenzene

Ecological Information

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 (*mysisidopsis 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.

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

NJTS50041NCD Trade Secret

Environmental fate and transport:

Biodegradation:

Evaluation: The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

Bioaccumulation: Due to the consistency of the product, dispersion into the environment is impossible. Therefore no negative effects on the environment may be anticipated based on the present state of knowledge.

Environmental toxicity:

Acute toxicity to aquatic invertebrates:

OECD Guideline 202, part 1 static

Daphnia magna/EC50 (48 h): >100 mg/l

Nominal concentration. The product has low solubility in the test medium. An eluate has been tested. No toxic effects occur within the range of solubility.

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

1330-20-7	Xylene	3.8
100-41-4	Ethylbenzene	1.3

PROP 65

CAS No.	CHEMICAL COMPOUND	% by WT
---------	-------------------	---------

100-41-4	Ethylbenzene	1.3

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.