

**1. Identification of the Substance/Preparation and of the Company/Undertaking**

**Product identifier**

Product name 4500BL

**Other means of identification**

Product Code(s) 4500BL  
 Synonyms No information available

**Recommended use of the chemical and restrictions on use**

Recommended Use ink.  
 Uses advised against No information available

**Details of the supplier of the safety data sheet**

**Manufacturer:**

Digital Design Inc.  
 67 Sand Park Rd.  
 Cedar Grove NJ 07009  
 PH: (973) 857-9500

Emergency telephone number Chemtel 1-800-255-3924 (Domestic)  
 01-813-248-0585 (International)

**2. Hazards Identification**

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 1
Reproductive Toxicity	Category 1B

**Label Elements**

**EMERGENCY OVERVIEW**

**DANGER**

**Hazard statements**

Causes serious eye damage  
 May damage fertility or the unborn child



**Appearance** blue

**Physical state** liquid

**Odor** Acrylic

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a POISON CENTER or doctor/physician

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****OTHER INFORMATION**

• Causes mild skin irritation

Unknown acute toxicity

3.19375% of the mixture consists of ingredient(s) of unknown toxicity

### 3. Composition/information on Ingredients

Chemical name	CAS-No	Weight %	Trade secret
Blue Dye	Proprietary	1 - 5	*
Lactam	Proprietary	1 - 5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**NOTE**

Remaining components are either not hazardous or below threshold limits.

### 4. First aid measures

**FIRST AID MEASURES****General advice**

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Immediate medical attention is not required. If symptoms persist, call a physician.

**Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.

**IF ON SKIN**

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

**Inhalation**

If symptoms persist, call a physician. Remove to fresh air. Move to fresh air in case of accidental inhalation of vapors.

**Ingestion**

Do NOT induce vomiting. Drink plenty of water. Immediate medical attention is not required. Rinse mouth. Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician.

**Self-protection of the first aider**

Use personal protective equipment as required.

**Most important symptoms and effects, both acute and delayed****Most Important Symptoms and Effects**

Hives.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically. May cause sensitization of susceptible persons. Use of epinephrine may be indicated.

## 5. Fire-fighting measures

**Suitable extinguishing media**

Use Carbon dioxide (CO2) Dry chemical Alcohol resistant foam

**Unsuitable extinguishing media** None.

**Specific hazards arising from the chemical**

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

Wear self-contained breathing apparatus and protective suit.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Use personal protective equipment as required. Avoid contact with skin and eyes. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Environmental precautions**

**Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** After cleaning, flush away traces with water. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Prevent product from entering drains. Dam up.

## 7. Handling and Storage

**Precautions for safe handling**

**Handling** Use personal protective equipment as required. Ensure adequate ventilation. Use with local exhaust ventilation. Do not breathe dust/fume/gas/mist/vapors/spray.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep out of the reach of children. Keep container tightly closed. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

**Incompatible Products** Strong oxidizing agents.

## 8. Exposure Controls/Personal Protection

**Control parameters**

**Exposure guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Blue Dye	TWA: 1 mg/m <sup>3</sup>	-	IDLH: 100 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>

NIOSH IDLH: *Immediately Dangerous to Life or Health*

**Appropriate engineering controls**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Showers. Eyewash stations.

**Individual protection measures, such as personal protective equipment**

<b>Eye/Face Protection</b>	Tight sealing safety goggles. Face protection shield.
<b>Skin and body protection</b>	For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.
<b>Respiratory protection</b>	None under normal use conditions.

**Hygiene Measures** Wash contaminated clothing before reuse. When using do not eat or drink. Regular cleaning of equipment, work area and clothing is recommended.

## 9. Physical and Chemical Properties

**Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	Acrylic
<b>Appearance</b>	blue	<b>Odor Threshold</b>	No information available
<b>color</b>	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks/ • Method</u>
<b>pH</b>	8.5 - 10	
<b>Melting point / freezing point</b>		
<b>Boiling point/range (°C) VALUE</b>	> 90 °C	
<b>Flash Point</b>	> 100 °C	Seta closed cup
<b>Evaporation Rate</b>	No information available	
<b>flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper Flammability Limit</b>	No information available	
<b>Lower Flammability Limit</b>	No information available	
<b>Vapor Pressure</b>	No information available	
<b>Vapor Density</b>	No information available	
<b>Specific gravity</b>	1.0 - 1.1	None known
<b>Water solubility</b>	Practically insoluble (~0.4 ug/mL)	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient: n-octanol/water</b>	No information available	
<b>Autoignition temperature</b>	>200 °C	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	

**OTHER INFORMATION**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

## 10. Stability and Reactivity

### Reactivity

No data available

### Chemical stability

Stable under normal conditions.

### Possibility of hazardous reactions

None under normal processing.

**Hazardous polymerization**      Hazardous polymerization does not occur.

### Conditions to avoid

Extremes of temperature and direct sunlight.

### Incompatible materials

Strong oxidizing agents.

### Hazardous decomposition products

Carbon oxides.

## 11. Toxicological Information

### Information on likely routes of exposure

<b>Product Information</b>	The product has not been tested
<b>Inhalation</b>	May cause irritation of respiratory tract. Avoid breathing vapors or mists.
<b>Eye contact</b>	Irritating to eyes. Avoid contact with eyes.
<b>IF ON SKIN</b>	May cause irritation. Avoid contact with skin.
<b>Ingestion</b>	May be harmful if swallowed. Do NOT taste or swallow.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Lactam	= 3598 mg/kg ( Rat )	= 8 g/kg ( Rabbit )	= 3.1 mg/L ( Rat ) 4 h

### Information on toxicological effects

**Symptoms**      No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Serious eye damage/eye irritation</b>	Risk of serious damage to eyes. Irritating to eyes. Irritating to eyes. May cause irritation to the skin and respiratory system.
<b>Sensitization</b>	No information available.
<b>Mutagenic effects</b>	No information available.
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen.
<i>IARC: (International Agency for Research on Cancer)</i> <i>Group 1 - Carcinogenic to Humans</i> <i>NTP: (National Toxicity Program)</i> <i>Known - Known Carcinogen</i>	
<b>Reproductive toxicity</b>	May impair fertility. Possible risk of impaired fertility. May cause harm to the unborn child. Possible risk of harm to the unborn child.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Chronic toxicity</b>	No information available. Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.
<b>Target organ effects</b>	Respiratory System, EYES, skin, Gastrointestinal tract (GI), kidney, liver.
<b>Aspiration hazard</b>	No information available.

### Numerical measures of toxicity - Product Information

**Unknown acute toxicity**      3.19375% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	64273 mg/kg
ATEmix (dermal)	109029 mg/kg
ATEmix (inhalation-dust/mist)	155 mg/l

## 12. Ecological Information

### ecotoxicity

8.39447045% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Lactam	500: 72 h Desmodesmus subspicatus mg/L EC50	832: 96 h Lepomis macrochirus mg/L LC50 static 4000: 96 h Leuciscus idus mg/L LC50 static 1072: 96 h Pimephales promelas mg/L LC50 static 1400: 96 h Poecilia reticulata mg/L LC50 static	4897: 48 h Daphnia magna mg/L EC50

### Persistence and degradability

No information available.

### Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Lactam	-0.46

### Other adverse effects

No information available

## 13. Disposal Considerations

### Waste treatment methods

#### **Waste treatment methods**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### **Contaminated packaging**

Do not re-use empty containers.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Blue Dye	Toxic

## 14. Transport Information

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

**ICAO** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

**RID** Not regulated

**ADR** Not regulated

**ADN** Not regulated

## 15. Regulatory Information

### International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Blue Dye	X	X	X	X	X	-	X	X
Lactam	X	X	X	X	X	X	X	X

### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Substances/EU List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

### U.S. Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Blue Dye -	1.0
Lactam -	1.0

#### **SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Category 1
<b>Chronic Health Hazard</b>	Category 1
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

#### **Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Blue Dye	-	X	-	-

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

### U.S. State Regulations

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Prop. 65
Lactam -	Developmental

### U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Blue Dye	X	-	X
Lactam	X	X	X

**U.S. EPA Label Information**

EPA Pesticide registration number Not applicable

**16. Other Information**

<b>NFPA</b>	Health hazard 1	flammability 1	Instability 0	Physical and chemical properties -
<b>HMIS</b>	Health hazard 1	flammability 1	Physical hazards 0	Personal precautions X

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**Revision note**

No information available

**Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**