

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

Product identifier

Product name 4500GR

Other means of identification

Product Code(s) 4500GR
 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 green

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

5.21875% 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).
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention/advice.
IF ON SKIN	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
Inhalation	None under normal use conditions. Move to fresh air in case of accidental inhalation of vapors. If breathing is irregular or stopped, administer artificial respiration. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Drink 1 or 2 glasses of water.

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.

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.

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 protection recommended in Section 8.

Environmental precautions

Environmental precautions 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 Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up After cleaning, flush away traces with water.

7. Handling and Storage

Precautions for safe handling

Handling Use personal protective equipment as required. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

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 ³	-	IDLH: 100 mg/m ³ TWA: 1 mg/m ³

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

Eye/Face Protection Wear safety glasses with side shields (or goggles). If splashes are likely to occur. Tight sealing safety goggles.

Skin and body protection	For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.
Respiratory protection	None under normal use conditions.
Hygiene Measures	Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	liquid	Odor	Acrylic
Appearance	green	Odor Threshold	No information available
color	No information available		
Property	Values	Remarks/ • Method	
pH	8 - 10		
Melting point / freezing point			
Boiling point/range (°C) VALUE	> 90 °C		
Flash Point	> 100 °C	Seta closed cup	
Evaporation Rate	No information available		
flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper Flammability Limit	No information available		
Lower Flammability Limit	No information available		
Vapor Pressure	No information available		
Vapor Density	No information available		
Specific gravity	1.0 - 1.1	None known	
Water solubility	Practically insoluble (~0.4 ug/mL)		
Solubility in other solvents	No information available		
Partition coefficient: n-octanol/water	No information available		
Autoignition temperature	>200 °C		
Decomposition temperature	No information available		
Kinematic viscosity	No information available		
Dynamic viscosity	No information available		
Explosive properties	No information available		
Oxidizing properties	No information available		

OTHER INFORMATION

Softening point	No information available
Molecular weight	No information available
VOC Content	No information available
Density	No information available
Bulk density	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

Product Information	The product has not been tested
Inhalation	May cause irritation of respiratory tract. Avoid breathing vapors or mists.
Eye contact	Avoid contact with eyes. Causes serious eye damage.
IF ON SKIN	May cause irritation. Avoid contact with skin.
Ingestion	Ingestion may cause stomach discomfort. 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

Serious eye damage/eye irritation	Risk of serious damage to eyes. Irritating to eyes.
irritation	May cause irritation of respiratory tract. May cause skin and eye irritation.
Sensitization	No information available.
Mutagenic effects	No information available.
<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>	
Reproductive toxicity	May cause harm to the unborn child. Possible risk of harm to the unborn child. May impair fertility. Possible risk of impaired fertility.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Chronic toxicity	No information available.
Target organ effects	EYES, kidney, liver, Respiratory System, skin.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

Unknown acute toxicity	5.21875% 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)	64319 mg/kg
ATEmix (dermal)	109089 mg/kg
ATEmix (inhalation-dust/mist)	155.3 mg/l

12. Ecological Information

ecotoxicity

8.40946% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Lactam	500: 72 h Desmodemus 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	4897: 48 h Daphnia magna mg/L EC50

		mg/L LC50 static 1400: 96 h Poecilia reticulata mg/L LC50 static	
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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/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical 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

Acute health hazard	Category 1
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	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

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

Issuing Date 02-Jan-2014

Revision date 26-Jun-2015

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