

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

Product identifier

Product name 4500YW

Other means of identification

Product Code(s) 4500YW
 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)

Reproductive Toxicity	Category 1B
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Label Elements

EMERGENCY OVERVIEW

DANGER

Hazard statements

May damage fertility or the unborn child



Appearance yellow

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

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**

Unknown acute toxicity

8.40875% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/information on Ingredients

Chemical name	CAS-No	Weight %	Trade secret
Lactam	Proprietary	0.1 - <1	*
Ethanol	64-17-5	0.01 - <0.1	*

*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. If symptoms persist, call a physician.

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. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

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**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** Tight sealing safety goggles. Wear safety glasses with side shields (or goggles). If splashes are likely to occur.**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	yellow	Odor Threshold	No information available
color	No information available		
Property	Values	Remarks/ • Method	
pH	8.5 - 10.5		
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	Contact with eyes may cause irritation. Avoid contact with eyes.
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	= 1350 mg/kg (Rat)	-	-
Ethanol 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 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

irritation May cause irritation of respiratory tract. May cause skin and eye irritation.
Sensitization No information available.
Mutagenic effects No information available.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. This product contains Ethanol which is classified as a possible carcinogen when ingested in the form of an alcoholic beverage. This is irrelevant as this product is used for ink jet ink applications not an alcoholic beverage.

Chemical name	ACGIH	IARC	NTP	OSHA
Ethanol 64-17-5	-	Group 1	Known	X

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

Reproductive toxicity Possible risk of impaired fertility. May impair fertility. May cause harm to the unborn child.
 Possible risk of harm to the unborn child.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown acute toxicity 8.40875% 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 (dermal) 149883 mg/kg

12. Ecological Information

ecotoxicity

9.35947% 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)
Ethanol 64-17-5	-	12.0 - 16.0: 96 h Oncorhynchus mykiss m/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static	9268 - 14221: 48 h Daphnia magna mg/L LC50 10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Mobility

No information available.

Chemical name	Log Pow
Ethanol 64-17-5	-0.32

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
Ethanol 64-17-5	Toxic; Ignitable

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
Lactam	X	X	X	X	X	-	X	-
Ethanol 64-17-5	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 - Korea 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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

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)

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
Ethanol - 64-17-5	Carcinogen Developmental

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethanol 64-17-5	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 26-Jun-2015

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