

# MATERIAL SAFETY DATA SHEET

## SECTION 1: IDENTIFICATION

Stratitec Cyan Inkjet Ink

**Manufacturer Name:** GSC Imaging

**Address:** 9242 Commerce Highway, Pennsauken, NJ 08110

**Phone:** 856-317-9301

**Emergency Phone Number:** Chemtrec 800-424-9300

**Product Use:** Refilling Inkjet Cartridges

## SECTION 2: PRODUCT COMPONENTS

INGREDIENTS	CAS#.	WT. %
Diethylene Glycol	111-46-6	1-5
Glycerin	56-81-5	5-10
Surfactant	Proprietary	0-1

Refer to Section 8 for occupational exposure limits.

## SECTION 3: HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** This product is a dark blue liquid with a mild odor.

**WARNING!** Eye and skin irritant. May be absorbed through the skin to cause effects similar to inhalation. Inhalation of vapors may cause irritation, headache, nausea, central nervous system depression, visual disturbances, metabolic acidosis, and damage to the liver and kidneys. Harmful if swallowed. Aspiration during swallowing or vomiting may cause lung damage.

See Section 11 for detailed health effects information.

## SECTION 4: EMERGENCY and FIRST AID PROCEDURES

**INGESTION:** Call a poison control center or doctor immediately for treatment advice. If conscious, give one 8 ounce glass of water to dilute. DO NOT induce vomiting unless directed by medical personnel. Do not give anything by mouth to or induce vomiting in a person who is unconscious or convulsing.

**SKIN CONTACT:** Remove contaminated clothing. Wash contact area thoroughly with soap and water until no traces of the chemical remains. Get medical attention if irritation develops or persists. Launder contaminated clothing before reuse. Discard contaminated clothing such as shoes that cannot be decontaminated.

**EYE CONTACT:** Flush eyes with water for 15 minutes while lifting the upper and lower lids. Get medical attention.

**INHALATION:** Remove victim to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult have qualified personnel administer oxygen. Get medical attention.

## SECTION 5: FIRE and EXPLOSION HAZARD DATA

**FLASH POINT:** None

**AUTOIGNITION TEMPERATURE:** Not available

**FLAMMABLE LIMITS:** (vol % in air) LEL: 1.6% (diethylene glycol)

UEL: 10.8% (diethylene glycol)

**EXTINGUISHING MEDIA:** Use alcohol foam, carbon dioxide and dry chemical.

**SPECIAL FIRE FIGHTING PROCEDURES:** Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus. Cool fire exposed containers and structures with water.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None known.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide, carbon dioxide, nitrogen oxides and acrolein.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Wear appropriate protective clothing as described in Section 8. Dike spill and absorb with an inert material. Collect into closable containers for proper disposal. Report spill as required by local and federal regulations.

#### SECTION 7: HANDLING and STORAGE

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** Protect containers from physical damage. Store in a cool, dry area away from oxidizers and other incompatible materials.

Avoid contact with eyes, skin and clothing. Avoid breathing vapors. Use with adequate ventilation. Remove and launder contaminated clothing before re-use. Wash thoroughly after handling and before eating, drinking, smoking or using toilet facilities.

**OTHER PRECAUTIONS:** Empty containers retain product residues and are hazardous. Follow all MSDS precautions in handling empty containers.

#### SECTION 8: EXPOSURE CONTROLS and PERSONAL PROTECTION

INGREDIENTS	CAS#.	EXPOSURE LIMITS
Diethylene Glycol	111-46-6	10 mg/m <sup>3</sup> TWA AIHA WEEL
Glycerin	56-81-5	5 mg/m <sup>3</sup> TWA OSHA PEL (respirable fraction) 10 mg/m <sup>3</sup> TWA ACGIH TLV
Surfactant	Proprietary	None Established

**VENTILATION:** Provide adequate general or local exhaust ventilation to maintain vapor concentrations below the exposure limits.

**RESPIRATORY PROTECTION:** Use NIOSH approved respirator with organic vapor cartridges or supplied air respirator if needed. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.

**EYE PROTECTION:** Chemical safety goggles if splashing is possible.

**PROTECTIVE CLOTHING:** Butyl rubber or other impervious gloves are recommended if contact is likely. Impervious apron, boots and other clothing are recommended if needed to prevent contact or if splashing is possible.

**OTHER PROTECTIVE EQUIPMENT:** For operations where contact can occur, an eye wash facility should be immediately available.

#### SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

**BOILING POINT (@760 mmHg):** 215°F / 101°C

**SPECIFIC GRAVITY (H20=1):** 1.02-1.04

**VAPOR PRESSURE:** 17.5 mmHg

**VAPOR DENSITY (Air=1):** Heavier than air

**SOLUBILITY IN WATER:** Complete

**APPEARANCE AND ODOR:** Dark red liquid with a mild odor.

**FREEZING POINT:** Not available

**COEFFICIENT of WATER/OIL:** Not available

**EVAPORATION RATE:** < Butyl Acetate

**pH:** 6.0-8.0

## SECTION 10: STABILITY and REACTIVITY

**STABILITY:** Stable.

**CONDITIONS TO AVOID:** None known.

**INCOMPATIBILITY:** Strong oxidizing agents, strong acids and strong bases.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may yield carbon monoxide, carbon dioxide, nitrogen oxides and acrolein.

**HAZARDOUS POLYMERIZATION:** Will not occur.

## SECTION 11: TOXICOLOGICAL INFORMATION

**EYE CONTACT:** May cause irritation with redness and pain.

**SKIN CONTACT:** Contact may cause skin irritation with redness, swelling and cracking. Widespread contact may cause absorption with symptoms similar to inhalation.

**INHALATION:** Vapors or mists may cause respiratory irritation with headache, dizziness, nausea, drowsiness, incoordination, euphoria, visual disturbances, fatigue, respiratory arrest and unconsciousness. May cause damage to the kidneys and liver.

**INGESTION:** Swallowing may cause gastrointestinal irritation, nausea, vomiting, diarrhea, increased respiration, increased heart rate decreased urine output, severe metabolic acidosis and damage to the kidneys and liver. Aspiration into the lungs during swallowing or vomiting may cause lung damage.

**CHRONIC EFFECTS of OVEREXPOSURE:** Prolonged or repeated exposure may cause dermatitis. Diethylene glycol has been found to be positive in the Ames Assay for mutagenicity.

**CARCINOGENICITY:** None of the components of this products are listed as a carcinogen by NTP, IARC or OSHA.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Individuals with chronic skin, respiratory, kidney and liver disorders may be at increased risk from exposure to this material.

**TOXICOLOGY DATA:** Toxicity values for this chemical are:

Diethylene Glycol: Oral rat LD<sub>50</sub>: 12,565 mg/kg  
Skin rabbit LD<sub>50</sub>: 11,890 mg/kg

Glycerin: Oral rat LD<sub>50</sub>: 12,600 mg/kg  
Skin rabbit LD<sub>50</sub>: >10 gm/kg  
Inhalation rat LC<sub>50</sub>: >570 mg/m<sup>3</sup>/1 hour

Surfactant: No data available

## SECTION 12: ECOLOGICAL INFORMATION

Diethylene Glycol: No data available

Glycerin: No data available

Surfactant: LC<sub>50</sub>/24 hour daphnia magna 3.2-5.2 mg/l  
LC<sub>50</sub>/96 hour fathead minnow 3.2 mg/l

## SECTION 13: DISPOSAL INFORMATION

**WASTE DISPOSAL METHOD:** Dispose of in accordance with all local, state and federal regulations.

**SECTION 14: TRANSPORTATION INFORMATION**

**DOMESTIC TRANSPORTATION**

**DOT SHIPPING NAME:** Not Regulated  
**DOT HAZARD CLASSIFICATION:** Not Regulated  
**DOT LABELS REQUIRED (49CFR172.101):** Not Applicable  
**UN NUMBER:** None

**INTERNATIONAL TRANSPORTATION**

**IMDG SHIPPING NAME:** Not Regulated  
**IMDG CLASS:** Not Regulated  
**UN NUMBER:** Not Applicable  
**IMDG LABEL:** None

**SECTION 15: REGULATORY INFORMATION**

**OSHA HAZARD CLASSIFICATION:** Irritant, target organ effects  
**EPA SARA 311 HAZARD CLASSIFICATION:** Acute health, chronic health  
**SARA TITLE 111 SECTION 313 INFORMATION:** This product contains the following chemicals that are regulated under SARA 313: None

**CERCLA HAZARDOUS SUBSTANCE (40CFR 116):** Not applicable  
**REPORTABLE QUANTITY:** Not applicable

**STATE R-T-K COMPOSITION INFORMATION**

COMPONENT	CAS #	WT%	PA	MA
Diethylene Glycol	111-46-6	1-5	Y	N
Glycerin	56-81-5	5-10	Y	Y

**CALIFORNIA PROPOSITION 65 INFORMATION:** This product contains no California Proposition 65 regulated chemicals.

**WHMIS CLASSIFICATION:** Class D - Division 2 - Subdivision B (Toxic material causing other chronic effects)

**SECTION 16: OTHER INFORMATION**

**NFPA Rating:** Health = 1      Fire = 0      Reactivity = 0  
**HMIS Rating:** Health = 1      Fire = 0      Reactivity = 1