



MSDS

1 - COMMODITY AND COMPANY IDENTIFICATION

Product Name : **Cleaning Solution for Printhead**
Dual Action: Dye and Pigment (AS-CLN-CLEAR)
Triple Action: Dye, Pigment and Sublimation (AS-CLN-GREEN)

Manufacturer Name : **BCH Technologies LLC**
Add: 4925 West Market Street, Suite 1118-1129, Greensboro, North Carolina, 27407, U.S.A.
Tel : 1-855-949-1100
Email: support@bchtechnologies.com

2 - CHEMICAL COMPOSITION

Product Name	Symbol	% In Weight	Remark
Glycol Mixture	NF(Non-Flammable)	8.7 – 12.0	No workplace exposure limits
Surfactant	Xi (Irritant)	4.0-6.3	No workplace exposure limits. Irritating to eyes, respiratory system and skin
Glycol Derivation	F (Flammable), Xi (Irritant)	1.0	Irritating to eyes, respiratory system and skin
Polyoxyethylene	Xn (NOXIVE), Xi (Irritant)	3.0	Irritating to eyes, respiratory system and skin
Water	NF(Non-Flammable), NXi (Non-Irritant), Xn (Nocive)	71.7 – 75.0	No workplace exposure limits

3 - HAZARDOUS INGREDIENTS

This product is not considered to be a hazardous substance under “OSHA’s” hazard communication standard (29 CFR 1910.1200)

4 - HMIS INFORMATION

Health - 1 (NPCA)
Flammability - 1 (NPCA)
Reactivity - 0 (NPCA)

5 - PHYSICAL DATA

Melting point - Liquid form -15 ± 5 °C (H₂O=0°C)
Boiling point - 100°C (H₂O=100°C)

Flash point	-	> 120°C
Auto-ignition temp	-	> 230°C
Specific gravity	-	1.05 ± 0.10 (H ₂ O=1)
State	-	Liquid form
Surface area	-	Unknown
Vapor pressure	-	17 mmHg at 20°C
% volatile	-	88 – 91.3 %
Solubility in water	-	Miscible
pH	-	6.0 – 9.5
Viscosity (cps)	-	1.8 – 2.5 for dye-based ink ;
Surface tension	-	28.0 – 32.0 (dyne/cm)
Appearance and odor	-	Color concentrated liquid, appreciable odor

6 - FIRE & EXPLOSION HAZARD

Flammability classification	-	non-flammable
Flash point	-	> 120°C (>120.3°C pensky martens closed cup)
Extinguishing media	-	water, carbon dioxide, dry chemicals, and foam
Protection of fire-fighters	-	wear individual breathing apparatus
Specific hazards	-	in case of fire or explosion, do not breath the fumes

7 - FIRST AID MEASURES

Skin contact	-	Wash in soap and water and rinse with water
Eye contact	-	Wash immediately with water, opening eyelids. If irritation continues, see an ophthalmologist
Ingestion	-	Call a doctor in case of doubt or if symptoms persist

8 - REACTIVITY DATA

Stability	-	Stable materials
Hazardous polymerization	-	Will not occur

9 - SPILL OR LEAK PROCEDURES

Spills	-	should be contained, absorbed and placed in suitable containers for disposal in a RCRA licensed facility
Waste disposal method	-	Small quantities may be treated in aerobic water treatment systems. Larger quantities may be incinerated or landfilled in accordance with all applicable federal, state, and local laws.
Container disposal	-	empty containers with less than one inch of residue may be crushed and landfilled at a licensed facility

10 - SPECIAL PROTECTION METHOD

Respiratory protection	-	Niosh approved vapor respirators recommended.
Ventilation	-	Local exhaust ventilation or containment recommended
Protective groves	-	Recommended
Eye protection	-	Safty glasses recommended

11 - TOXICOLOGICAL INFORMATION

Acute toxicity	-	LD50	=	2000 mg/kg (ORAL RAT)
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Skin irritation - OCDE404 : Non irritant
Eye irritant - OCDE405 : Irritant

12 - ECOLOGICAL INFORMATION

Possible environment impact / ecotoxicity - Ames test : Negative

13 - HANDLING AND STORAGE

Handling - handling without causing dust

Storage - product is stable under normal storage condition

14 - TRANSPORTATION REQUIREMENTS

D.O.T. hazard classification (49 CFR 172) - None / Non-hazardous

D.O.T. labels required: None

I.A.T.A. Dangerous Goods Regulations: Non D.G.

15 - SPECIAL PRECAUTIONS

FDA status - this product does not have FDA approval as a food additive

Label - Xn nocive

R36/37/38

S9

S16

S25

S33

16 - STABILITY

Heat stability test - > 30 days at 70°C

Freeze thaw test - > 6 cycles at -20°C

Room temperature - > 2 years

17 - OTHER INFORMATIONS

Uses - used in desktop and wide format plotter printers

Solvent system - water

18 – HEAVY METAL CONTENT

Arsenic(As)	: <0.5 ppm	Lead(Pb)	: <0.6 ppm
Mercury(Hg)	: <0.5 ppm	Barium(Ba)	: <0.8 ppm
Antimony(Sb)	: <0.6 ppm	Cadmium(Cd)	: <0.5 ppm
Selenium(Se)	: <0.5 ppm	Chromium(Cr)	: <0.5 ppm

19. – REGULATORY INFORMATION

- All components listed in TSCA Inventory or exempt under 40 CFR 723.5
 - SARA: no reactive hazard, no pressure hazard, no fire hazard.
 - DOT/IATA: not regulated by DOT 49 CFR or IATA
 - California Proposition 65: no listed chemical
 - Massachusetts Substance List: no listed chemical
 - New Jersey Right to Know List: no listed chemical
 - Pennsylvania Hazardous Substance List: diethylene glycol
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Reported by:

Company Name : BCH Technologies

Date: 8/19/2016

Authorized Person: Wen Dai

Signature: _____

