ANABRIGHT INK CYAN

Version 3.0

Revision Date 09/20/2016 Ref. 130000128491

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	AnaBright Ink - Cyan
Product Use	:	Printing ink
Restrictions on use	:	Do not use product for anything outside of the above specified uses
Manufacturer/Supplier	:	AnaJet Inc 1100 Valencia Ave Tustin, CA 92780 USA
Product Information	:	1-877-626-2538
Medical Emergency	:	1-800-441-3637 (outside the U.S. 1-302-774-1139)
Transport Emergency	:	CHEMTREC: +1-800-424-9300 (outside the U.S. +1-703-527-3887)

SECTION 2. HAZARDS IDENTIFICATION

Product hazard category

Specific target organ toxicity - repeated exposure — Category 2

Label content

Pictogram :

Signal word : Warning

Hazardous warnings : May cause damage to organs through prolonged or repeated exposure. (Kidney)

Hazardous prevention measures : Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Get medical advice/ attention if you feel unwell.
Dispose of contents/ container to an approved waste disposal plant.

Other hazards
The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 22.4219 %

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Ethane-1,2-diol	107-21-1	<20 %
Alkyl ether		<10 %
Cyclic amide		<10 %
Copper compound		<10 %
Non regulated ingredients		>50%

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4. FIRST AID MEASURES

General advice	:	Never give anything by mouth to an unconscious person. When symptoms persist or in all cases of doubt seek medical advice.
Inhalation	:	If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If breathing is irregular or stopped, administer artificial respiration. Get medical attention.
Skin contact	:	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before re-use.
Eye contact	:	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical advice/ attention.
Ingestion	:	If swallowed, call a poison control centre or doctor immediately. Rinse mouth with water. DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Most important symptoms/effects, acute and delayed	:	No applicable data available.
Protection of first-aiders	:	No applicable data available.
Notes to physician	:	No specific intervention is indicated. Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, Dry chemical, Carbon dioxide (CO2)
Unsuitable extinguishing media	:	No applicable data available.
Specific hazards	:	Hazardous decomposition products formed under fire conditions. (see also section 10) Avoid breathing decomposition products.

Special protective equipment for firefighters	:	Exposure to decomposition products may be a hazard to health. Wear self-contained breathing apparatus for firefighting if necessary.
Further information	:	Evacuate personnel to safe areas. Stop spill/release if it can be done with minimal risk. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Safeguards (Personnel)	:	Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Wear suitable protective equipment.
Environmental precautions	:	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Clean contaminated floors and objects thoroughly while observing environmental regulations.
Spill Cleanup	:	Contain spill. Soak up with inert absorbent material. Collect and contain contaminated absorbent and dike material for disposal. Keep in suitable, closed containers for disposal. Ventilate the area. Clean contaminated floors and objects thoroughly while observing environmental regulations.
Accidental Release Measures	:	Dispose of in accordance with local regulations.

SECTION 7. HANDLING AND STORAGE

Handling (Personnel)	:	Avoid inhalation, ingestion and contact with skin and eyes. Do not use in areas without adequate ventilation. For personal protection see section "Exposure controls/personal protection" Handle in accordance with good industrial hygiene and safety practice. Keep container closed. Keep away from food and drink. Wash hands before eating, drinking, or smoking. Remove contaminated clothing and protective equipment before entering eating areas. Wash contaminated clothing before re-use.
Handling (Physical Aspects)	:	Normal measures for preventive fire protection.

Dust explosion class	:	No applicable data available.
Storage	:	Keep containers tightly closed in a cool, well-ventilated place. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material. Do not reuse empty container. Stable under normal conditions.
Storage period	:	No applicable data available.
Storage temperature	:	No applicable data available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls	:	Ensure adequate ventilation. Maintain air concentrations below occupational exposure standards. General mechanical ventilation is normally adequate but use local exhaust where necessary to maintain exposures below acceptable limits.
Personal protective equipment		
Respiratory protection	:	No personal respiratory protective equipment normally required. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacturer.
Hand protection	:	Material: Impervious gloves Additional protection: Gloves must be inspected prior to use., Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough., The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other., The exact break through time can be obtained from the protective glove producer and this has to be observed., Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Eye protection	:	Wear safety glasses or coverall chemical splash goggles.
Skin and body protection	:	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Lightweight protective clothing and safety shoes are recommended.

Exposure Guidelines

Exposure Limit Values

Ethane-1,2-diol

TLV	(ACGIH)	100 mg/m3	TLV-C Aerosol.
AEL *	(DUPONT)	10 mg/m3	8 & 12 hr. TWA Particulate.
AEL *	(DUPONT)	50 ppm	8 & 12 hr. TWA Vapor.

Alkyl ether

AEL *	(DUPONT)	10 mg/m3	8 & 12 hr. TWA Aerosol.
AEL *	(DUPONT)	100 ppm	8 & 12 hr. TWA Vapor.

Cyclic amide

AEL *	(DUPONT)	5 ppm	8 & 12 hr. TWA

Copper compound

TLV	(ACGIH)	0.2 mg/m3	TWA Fume. as Cu
TLV	(ACGIH)	1 mg/m3	TWA Dust and mist. as Cu

Non regulated ingredients
No applicable data available.

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	:	liquid
Form	:	liquid
Color	:	blue
Odor	:	not significant
Odor threshold	:	No applicable data available.
pH	:	7 - 9

Melting point/range	:	No applicable data available.
Boiling point/boiling range	:	Boiling point 100 °C (212 °F)
Flash point	:	93.9 °C
Evaporation rate	:	Slower than Ether
Flammability (solid, gas)	:	No applicable data available.
Upper explosion limit	:	No applicable data available.
Lower explosion limit	:	No applicable data available.
Vapour Pressure	:	No applicable data available.
Vapour density	:	No applicable data available.
Specific gravity (Relative density)	:	No applicable data available.
Water solubility	:	No applicable data available.
Solubility(ies)	:	No applicable data available.
Partition coefficient: n-octanol/water	:	No applicable data available.
Auto-ignition temperature	:	No applicable data available.
Decomposition temperature	:	No applicable data available.
Viscosity, kinematic	:	No applicable data available.
Viscosity, dynamic	:	No applicable data available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	The product is chemically stable under recommended conditions of storage,

use and temperature.
Stable at normal temperatures and storage conditions.

Possibility of hazardous reactions	:	None reasonably foreseeable.
Conditions to avoid	:	Avoid extreme heat. Do not freeze.
Incompatible materials	:	Acids, bases and strong oxidizing agents
Hazardous decomposition products	:	Under fire conditions:, formaldehyde-like

SECTION 11. TOXICOLOGICAL INFORMATION

ARTISTRI® P5100+ CYAN PIGMENT INK

Further information	:	No data is available on the product itself.Information given is based on data on the components.

Ethane-1,2-diol

Inhalation	:	no data available
Dermal LD50	:	> 3,500 mg/kg , Mouse
Oral LD50	:	1,650 mg/kg , Cat
Skin irritation	:	No skin irritation, Rabbit
Eye irritation	:	No eye irritation, Rabbit
Skin sensitization	:	Does not cause skin sensitisation., human
Repeated dose toxicity	:	Oral Rat - Target Organs: Kidney Kidney damage
Carcinogenicity	:	Not classifiable as a human carcinogen. Animal testing did not show any carcinogenic effects.
Mutagenicity	:	Animal testing did not show any mutagenic effects. Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Reproductive toxicity	:	No toxicity to reproduction

No effects on or via lactation
Animal testing showed no reproductive toxicity.

Teratogenicity : Evidence suggests the substance is not a developmental toxin in animals.

Alkyl ether

Inhalation 4 h LC50 : > 48.1 mg/l , Rat

Inhalation 4 h Acute toxicity estimate : > 5 mg/l , Rat

Dermal LD50 : 13,300 mg/kg , Rabbit

Oral LD50 : 20,760 mg/kg , Rat

Skin irritation : slight irritation, Rabbit

Eye irritation : slight irritation, Rabbit

Skin sensitization : Did not cause sensitisation on laboratory animals., Guinea pig

Patch test on human volunteers did not demonstrate sensitisation properties., human

Repeated dose toxicity : Oral
multiple species
-
Oxylate crystal deposition

Carcinogenicity : Not classifiable as a human carcinogen.

Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Animal testing did not show any mutagenic effects.

Reproductive toxicity : No toxicity to reproduction
Animal testing showed no reproductive toxicity.

Teratogenicity : Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

Cyclic amide

Inhalation : Rat
An LC50/inhalation/4h/rat could not be determined because no

mortality of rats was observed at the maximum achievable concentration.

Dermal LD50	:	> 2,000 mg/kg , Rat
Oral LD50	:	8,000 mg/kg , Rat
Skin irritation	:	No skin irritation, Rabbit
Eye irritation	:	Eye irritation, Rabbit
Skin sensitization	:	Does not cause skin sensitisation., Mouse Information given is based on data obtained from similar substances.
Repeated dose toxicity	:	Oral Rat - NOAEL: 207 mg/kgMethod: OECD Test Guideline 408 Kidney effects
Mutagenicity	:	Animal testing did not show any mutagenic effects. Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Reproductive toxicity	:	No toxicity to reproduction Animal testing showed no reproductive toxicity.
Teratogenicity	:	Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

Copper compound

Dermal LD50	:	> 5,000 mg/kg , Rat
Oral LD50	:	> 16,000 mg/kg , Mouse
Skin irritation	:	No skin irritation, Rabbit
Eye irritation	:	No eye irritation, Rabbit
Skin sensitization	:	Does not cause skin sensitisation., Guinea pig
Repeated dose toxicity	:	Oral Rat -

NOAEL: 4,500 mg/kgMethod: OECD Test Guideline 408
No toxicologically significant effects were found.

Mutagenicity : Animal testing did not show any mutagenic effects.
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Reproductive toxicity : No toxicity to reproduction
Animal testing showed no reproductive toxicity.

Teratogenicity : Animal testing showed no developmental toxicity.

Carcinogenicity

The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

Ethane-1,2-diol

96 h LC50 : Pimephales promelas (fathead minnow) 72,860 mg/l

96 h ErC50 : Pseudokirchneriella subcapitata (green algae) 6,500 mg/l

48 h EC50 : Daphnia magna (Water flea) > 100 mg/l OECD Test Guideline 202

Alkyl ether

96 h LC50 : Pimephales promelas (fathead minnow) 75,200 mg/l

48 h LC50 : Leuciscus idus (Golden orfe) > 10,000 mg/l

24 h EC50 : Daphnia magna (Water flea) > 10,000 mg/l

Cyclic amide

72 h ErC50 : Desmodesmus subspicatus (green algae) > 500 mg/l

48 h EC50	:	Daphnia magna (Water flea) > 500 mg/l Directive 67/548/EEC, Annex V, C.2.

Copper compound

96 h LC50	:	Oncorhynchus mykiss (rainbow trout) 355.6 mg/l
72 h ErC50	:	Desmodesmus subspicatus (green algae) > 100 mg/l OECD Test Guideline 201
48 h EC50	:	Daphnia magna (Water flea) > 500 mg/l Directive 67/548/EEC, Annex V, C.2.

Environmental Fate

Ethane-1,2-diol

Biodegradability	:	Readily biodegradable 90 - 100 % OECD Test Guideline 301
Bioaccumulation	:	Bioaccumulation is unlikely.

Alkyl ether

Biodegradability	:	90 % Readily biodegradable
Bioaccumulation	:	Bioconcentration factor (BCF) : 10 - 180 Bioaccumulation is unlikely.

Cyclic amide

Biodegradability	:	Biodegradable Readily biodegradable
Bioaccumulation	:	Bioaccumulation is unlikely.
Additional ecological information	:	No data is available on the product itself. Information given is based on data on the components.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods - Product	:	If recycling is not practicable, dispose of in compliance with local regulations. Never place unused product down any indoor or out door drain.
Waste disposal methods - Container	:	Do not reuse empty container. Contaminated/not cleaned containers should be treated/handled like product waste.

Dispose of container properly.
Refer to applicable Local, State/Provincial, and Federal Regulations, as well as industry Standards.

Contaminated packaging : No applicable data available.

SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA	:	On the inventory, or in compliance with the inventory
SARA 313 Regulated Chemical(s)	:	Ethane-1,2-diol
PA Right to Know Regulated Chemical(s)	:	Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances): Ethane-1,2-diol, Alkyl ether, Cyclic amide
NJ Right to Know Regulated Chemical(s)	:	Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): Ethane-1,2-diol, Copper compound
CERCLA Reportable Quantity	:	29 lbs Based on the percentage composition of this chemical in the product.: Copper compound
California Prop. 65	:	WARNING! This product contains a chemical or chemicals known to the State of California to cause cancer. WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

SECTION 16. OTHER INFORMATION

Revision Date : 09/20/2016

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

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