Report No.: 18300RC10197204

MATERIAL SAFETY DATA SHEETS

Client Name :

Address :

Product Name : Water based Pigment ink(Black)

Date : May 18, 2021

Shenzhen Anbotek Compliance Laboratory Limited

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Applicant	:	
Address	:	

The submitted sample and sample information was/were submitted and identified by/on the behalf of the client

Sample Name	:	Water based Pigment ink(Black)
Model No.	:	
Supplier	:	
Trade Mark	:	
Country of Destination	:	Europe
Country of Origin	:	
Job Received Date	:	May 08, 2021
Preparation Period	:	May 08, 2021 to May 13, 2021
Preparation standard	:	REACH Regulation (EC) No 1907/2006 ANNEX II with its amendment Regulation (EC) No 1272/2008, Regulation (EU) 2015/830 and Regulation (EU) 2020/878.

Edited by _____ Reviewed by _____ Authorized Signatory _____

MATERIAL SAFETY DATA SHEETS

Section 1. Chemical Product and Company Identification

Product identifier

Product name	:	Water based Pigment ink(Black)
Model No.	:	
CAS No.	:	Refer to section 3
EC No.	:	Refer to section 3
Molecular formula	:	Refer to section 3

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	:	For digital inkjet printing
Uses advised against	:	/

Details of the supplier of the safety data sheet

Supplier	:	
Manufacturer	:	/
Country of origin	:	
Export to	:	Europe
Website	:	/
Telephone	:	
Fax	:	/
E-mail address	:	

Emergency telephone number

Emergency phone	:	/

Section 2. Hazards identification

Hazards Classification

In accordance with Regulation (EC) No 1272/2008 (CLP) ,Regulation (EU) 2015/830 and Regulation (EU) 2020/878 is divided into the following hazard category.

Physical hazard	:	Not classified as a physical hazard category.
Health hazard	:	Acute toxicity (oral) (Category 4),H302
Environment hazard	:	Not classified as an environment hazard category.

Label elements

Hazard pictograms	:	 GHS07
Signal word	:	Warning
Hazard statements	:	H302 Harmful if swallowed
Precautionary statements-prevention	:	P264 Wash … thoroughly after handling. P270 Do not eat, drink or smoke when using this product.
Precautionary statements-response	:	P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P330 Rinse mouth.
Precautionary statements-Storage	:	No data available
Precautionary statements- Disposal	:	P501 Dispose of contents/container to …
Supplemental hazard	:	No data available

Other hazards

This mixture contains no ingredients considered to be Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) at levels of 0.1% or higher.

Section 3. Composition/Information on Ingredients

Chemical Name	Molecular formula or Element symbol	Percent of Content(%)	CAS No.	EC No.
Water	H_2O	40~70	7732-18-5	231-791-2
Ethylene glycol	$C_2H_6O_2$	5~20	107-21-1	203-473-3
Glycerin	$C_3H_8O_3$	3~10	56-81-5	200-289-5
Carbon Black	C	3~6	1333-86-4	215-609-9
Diethylene glycol	$C_4H_{10}O_3$	1~5	111-46-6	203-872-2
Butyldiglycol	$C_8H_{18}O_3$	1~2	112-34-5	203-961-6

Hazardous ingredients according to Regulation (EC) No 1272/2008 , Regulation (EU) 2015/830 and Regulation (EU) 2020/878.:

Component	CAS No.	EC No.	Index-No.	Classification
Diethylene glycol	111-46-6	203-872-2	603-140-00-6	Acute Tox. 4, H302
Ethylene glycol	107-21-1	203-473-3	603-027-00-1	Acute Tox. 4, H302
Butyldiglycol	112-34-5	203-961-6	603-096-00-8	Eye Irrit. 2,H319
Carbon Black	1333-86-4	215-609-9	/	Carc. 2,H351

Section 4. First Aid Measures

Inhalation : If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Skin Contact : In case of skin contact, wash off with soap and plenty of water.

Eye Contact : If contact with dust/smoke, rinse immediately with plenty of water for 15 minutes. If persist irritating, seek medical advice immediately.

Ingestion : If swallowed, rinse mouth with water. Never give anything by mouth to an unconscious person. Seek medical advice immediately.

Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

Section 5. Fire Fighting Measures

Extinguishing media

Suitable Fire Extinguishing Media	:	Foam, carbon dioxide, dry chemical extinguishers.
Unsuitable Fire Extinguishing Media	:	None.
Special hazard arising from the substance or mixture	:	Hazardous combustion products may include carbon monoxide.The vapor is heavier than air, spreads along the ground and distant ignition is possible.
Combustion Products	:	Carbon monoxide, carbon dioxide.

Advice for firefighters

Special fire fighting procedures	:	As soon as possible, remove the goods from fire to open place. For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, Standing on the windward, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers.
Protective Equipment	:	Wear suitable protective clothing, gloves, eye/face protection and self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear

Section 6. Accidental Release Measures

Person precautions protective equipment and emergency procedures	:	Avoid inhalation, eye, or skin contact by using appropriate precautions outlined in this MSDS (see section 8). Fine turnings and small chips should be swept or vacuumed and placed into appropriate disposable containers. Scrap should be reclaimed for recycling. Prevent materials from entering drains, sewers, or waterways.
Environment precautions	:	Prevent to enter sewage, soil, river and sea.

Methods and materials for containment and cleaning up	:	For small liquid spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely Remove contaminated soil and dispose of safely. For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

Section 7. Handling and Storage

Handling	:	Operating personnel must train specially and follow close to the line of operating instruction. Ensure good ventilation/exhaustion at the workplace. Minimize vapor/aerosol generation and accumulation. Wear suitable protective clothing, gloves and eye/face protection. Do not eat, drink or smoke in working areas. Wash skin thoroughly before breaks and after handing. Equip with relevant types and quantities of extinguishment instruments and device for divulgence handing.
Conditions for safe storage, including any incompatibilities	:	Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

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Section 8. Exposure Controls/Personal Protection

Occupational exposure limits	:	Diethylene glycol-TWA- 10 mg/m^3(UK. EH40 WEL – Workplace Exposure Limits) Glycerin – TWA - 10 mg/m^3(UK. EH40 WEL – Workplace Exposure Limits) Ethylene glycol- TWA (vapour) – 20ppm, 52 mg/m3; TWA (particulate) – 10 mg/m3; STEL – 40ppm, 104mg/m3. Carbon Black- TWA-3.5 mg/m3(UK. EH40 WEL – Workplace Exposure Limits) Butyldiglycol- TWA- 10 ppm 67.5 mg/m3(UK. EH40 WEL – Workplace Exposure Limits)
Monitoring Method	:	No data available.
Appropriate engineering controls	:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Respiratory Protection	:	If the dust density exceed in the air, must wear mask, or self-contained breathing.
Eye Protection	:	Wear suitable chemical safety goggles.
Body Protection	:	Wear work clothes.
Hands Protection	:	Wear suitable protective gloves.
Other Protection	:	No smoking, dining and drinking water in the workplace. Keep good habit of hygiene. Shower and change clothes after work.

Section 9. Physical and Chemical Properties

Appearance	:	Liquid
Odor	:	Weak odor
Color	:	Black
Density	:	No data available.
Solubility	:	Dissolve in water
Boiling point/range	:	95~110℃.
Flash point	:	No data available.
PH	:	7~10
Relative density	:	No data available.
Viscosity	:	3.0~5.0

Tensile strength N/mm² : No data available.

Section 10. Stability and Reactivity

Stability : Stable under normal temperature and pressure.

Distribution of Ban : Strong acid, strong basis,strong oxidizing agents, light metals, aluminum

Conditions to Avoid : May form peroxides of unknown stability.
Strong heating.

Hazardous Polymerization : No data available.

Hazardous Decomposition Products : Carbon monoxide.

Section 11. Toxicological Information

Acute Toxicity : Diethylene glycol :LD50-Oral - Rat - 12,565 mg/kg; LD50-Oral - Human - 1,000 mg/kg; LD50-Dermal - Rabbit - 11,890 mg/kg.
Glycerin: LD50- Oral - Rat - 12,600 mg/kg; LD50 Dermal - Rabbit - > 10,000 mg/kg.
Ethylene glycol: LC50 Inhalation - Rat - male and female - 6 h - > 2.5 mg/l; LD50 Dermal - Mouse - male and female - > 3,500 mg/kg.
Carbon Black :LD50 Oral - Rat - male and female - > 8,000 mg/kg
Butyldiglycol: LD50 Oral - Mouse - male - 2,410 mg/kg; LD50 Dermal - Rabbit - male - 2,764 mg/kg

Skin corrosion/irritation : Butyldiglycol: Skin - Rabbit
Result: Mild skin irritation - 1 h

Serious eye damage/eye irritation : Butyldiglycol: Eyes - Rabbit
Result: Causes serious eye irritation. - 72 h

Respiratory or skin sensitisation : No data available.

Germ cell mutagenicity : No data available.

Carcinogenicity	:	IARC: 2B - Group 2B: Possibly carcinogenic to humans (Carbon black)
Reproductive toxicity	:	No data available.
Specific target organ toxicity-single exposure	:	No data available.
Specific target organ toxicity-repeated exposure	:	No data available.
Aspiration hazard	:	No data available.
Additional information	:	Ethylene glycol: When ingested early symptoms mimic alcohol inebriation and are followed by nausea, vomiting, abdominal pain, weakness, muscle tenderness, respiratory failure, convulsions, cardiovascular collapse, pulmonary edema, hypocalcemic tetany, and severe metabolic acidosis. Without treatment, death may occur in 8 to 24 hours. Victims who survive the initial toxicity period usually develop renal failure along with brain and liver damage. Exposure to and/or consumption of alcohol may increase toxic effects. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. After absorption: agitation, CNS disorders Systemic effects: After a latency period: Tiredness, ataxia (impaired locomotor coordination), Unconsciousness Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice. Central nervous system - Irregularities - Based on Human Evidence.

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Section 12. Ecological Information

Eco-toxicity : Diethylene glycol:Toxicity to fish- LC50 - Pimephales promelas - 75,200 mg/l - 96 h

Glycerin: Toxicity to fish - NOEC - Pimephales promelas (fathead minnow) - 52,930 mg/l - 96 h; Toxicity to daphnia and other aquatic invertebrates - EC50 - Daphnia magna (Water flea) - > 10,000 mg/l - 48 h.

Ethylene glycol: Toxicity to fish: static test LC50 - Pimephales promelas (fathead minnow) - > 72,860 mg/l - 96 h; Toxicity to daphnia and other aquatic invertebrates: static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h; Toxicity to algae: IC5 - Scenedesmus quadricauda (Green algae) - > 10,000 mg/l - 7d; Toxicity to bacteria: static test EC20 - activated sludge - > 1,995 mg/l - 30 min.

Carbon Black : Toxicity to fish LC50 - Danio rerio (zebra fish) - > 1,000 mg/l - 96 h; Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - > 5,600 mg/l - 24 h; Toxicity to algae static test EC50 - Desmodesmus subspicatus (green algae) - >10,000 mg/l - 72 h

Butyldiglycol: Toxicity to fish static test LC50 - Lepomis macrochirus (Bluegill sunfish) - 1,300 mg/l- 96 h; Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h; Toxicity to algae static test ErC50 - Desmodesmus subspicatus (green algae) - > 100mg/l - 96 h ;Toxicity to bacteria static test EC10 - activated sludge - > 1,995 mg/l - 30 min

Biodegradable : Ethylene glycol - aerobic - Exposure time 10 d - 90 - 100 % - Readily biodegradable.

Butyldiglycol: aerobic - Exposure time 28 d-Result: ca.85 % - Readily biodegradable.

Non-biodegradable : No data available.

Bioconcentration or biological accumulation : Ethylene glycol: Does not bioaccumulate.

Butyldiglycol: Does not bioaccumulate.

Other harmful effects : No known significant effects or critical hazards.

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Section 13. Disposal Considerations

Waste disposal methods	:	Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts. Dispose in accordance with federal, state, and local health and environmental regulations. Prevent materials from entering drains, sewers, or waterways.
Attention abandoned	:	Prevent materials from entering drains, sewers, or waterways.

Section 14. Transport Information

Maritime transport IMDG

IMDG Class	:	Not classified
UN-Number	:	No data available.
EMS-No.	:	No data available.
Packing group	:	No data available.
Proper shipping name	:	No data available.

Air transport ICAO-TI and IATA-DGR

ICAO-TI-II class	:	Not classified
UN-Number	:	No data available.
Label	:	No data available.
Packing group	:	No data available.
Proper shipping name	:	No data available.

Land transport ADR/RID(cross-border)

Hazard class	:	Not classified.
Danger code (Kemler)	:	No data available.
UN-number	:	No data available.
Label	:	No data available.
Packing group	:	No data available.
Proper shipping name	:	No data available.

Special precautions for user : Examine whether the package of the containers are integrate and tighten closed before transport. No divulgence, no collapse, no precipitation or no damage during the course of transportation. Don't put the goods together with oxidizer, acid and so on. The transport vehicle and ship must be cleaned and sterilized otherwise it is not allowed to assemble articles. During transport, the vehicle should prevent exposure, rain and high temperature. Under the condition of Road Transportation, the driver should drive in accordance with regulated route, do not stop over in the residential area and congested area. No slipping up in rail road. The sample is not regulated for transport of dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available.

Section 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

German regulations concerning the classification of hazard for water(WGK)	:	No data available.
Substance of Very High Concern (SVHC) according to Regulation (EC) No 1907/2006 (REACH)	:	Not listed.
The conditions of restrictions according to Regulation (EC) No 1907/2006 (REACH) Article 67 and Annex XVII for the manufacturing, placing on the market and use must be observed	:	Butyldiglycol ,CAS:112-34-5
Regulation (EC) No 1907/2006 (REACH) Annex XVII(requiring Authoursation for use)	:	Not listed.
Regulation (EC) No 1907/2006 (REACH)-Pre-registered substance.	:	See in section 3.
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not listed.
Regulation (EU) No 649/2012 concerning the export and import of dangerous chemicals, Annex I	:	Not listed.
ELINECS(European List of Notified Chemical Substances)	:	See in section 3
Particular provisions	:	No data available.

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Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

Section 16. Other Information

The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

***** End of MSDS *****

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