



MATERIAL SAFETY DATA SHEET (MSDS)

Moorim Chemtech

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME : Moorim Ink Series BLACK PIGMENT INK
 PRODUCT TYPE : BLACK PIGMENT INK FOR HP CARTRIDGE
 MANUFACTURER : Moorim Chemtech Co., Ltd.
 ADDRESS : 542-7 GAJWADONG, SEO-GU, INCHON, KOREA 404-250
EMERGENCY TELEPHONE NUMBER : +82-32-571-8080 / Fax : +82-32-571-8121.
 INFORMATION TELEPHONE NUMBER : +82-32-571-8080.
 REASON FOR MSDS ISSUE : New product.

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	WEIGHT %	OSHA PEL	ACGIH TLV
PYRROLIDONE, 2-	616-45-5	5-15%	Not Listed	Not Listed
CARBON BLACK	1333-86-4	1-10%	3.5mg/m3	3.5mg/m3
ISOPROPYL ALCOHOL	67-63-0	0-10%	Not Listed	400ppm
VEHICLE : WATER	7732-18-5	50-90%	Not Listed	Not Listed
Remaining ingredients not considered hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910. 1200				

3. HAZARDS IDENTIFICATION

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

: None reported or known to exist for the product unless listed here

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

: Eye/skins may cause irritation

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

: May cause gastrointestinal irritation, vomiting, nausea, and diarrhea

ACUTE HEALTH RISKS AND SYMPTOMS OF EXPOSURE

: None known or determined for the product

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

: None known or determined for the product

CHRONIC HEALTH HAZARDS

: None known or determined for the product

4. FIRST AID MEASURES

Skin contact : Wash with plenty of soap and water. Do not use organic solvents.

Eye contact : Rinse eyes thoroughly with water. In case of eye irritation, seek medical attention.

Inhalation : Remove victim to fresh air.

Swallowed : Do NOT induce vomiting. Call a doctor and contact local poison control center immediately.

5. FIRE-FIGHTING MEASURES

FLASH POINT : N/A (Non-flammable water based)

METHOD USED : N/A

FLAMMABLE LIMITS IN AIR BY VOLUME -LOWER : NA - UPPER : NA

EXTINGUISHING MEDIA : NA

SPECIAL FIREFIGHTING PROCEDURES : NA

UNUSUAL FIRE AND EXPLOSION HAZARDS : NA

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Soak up on paper or other absorbent and scoop into closed containers.

Flush area with plenty of water.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Storage temperature : Standard room temperature (68 degree Fahrenheit)

Special sensitivity : Heat, light, moisture

Precautions : Keep container closed, Store away from traffic.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Technical measures/Precautions : No special precautions required.

Respiratory protection : Not necessary.

Ventilation : Mechanical ventilation is acceptable.

Hand protection : Wear protective gloves

Eye protection : Wear suitable goggles or safety glasses with side shields.

Skin and body protection : Wear overalls and closed footwear.

Further information : Avoid contamination of food, drink, etc. No smoking when handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point	: 120 C	Specific Gravity	1.05
Vapor Pressure (mm Hg)	: 17.5 mmHg	Melting Point	: Not applicable
Vapor Density (NR=1)	: Heavier than air	Evaporation rate	: Very Slight (Butyl Acetate = 1)
Solubility in Water	: Complete		
Appearance and Odor	: Black Solution , mild odor		

10. STABILITY AND REACTIVITY

STABILITY : Stable.

CONDITION TO AVOID : None known.

MATERIALS TO AVOID : Strong oxidizing agents and strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS : Thermal decomposition may release oxides of carbon, nitrogen.

HAZARDOUS POLYMERIZATION : None.

11. TOXICOLOGICAL INFORMATION

No information available.

12. ECOLOGICAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATIONS

Waste shall be disposed of in accordance with federal, state, and local environmental control regulations.

14. TRANSPORT INFORMATION

D.O.T Shipping name : Not regulated.

15. REGULATORY INFORMATION

All components of the ink used in the products listed on this MSDS are listed on ;

TSCA (Toxic Substance Control Act) Inventory

European (EINECS) Inventory

CDSL (Canadian Domestic Substance List)

OSHA STATUS

INTERNATIONAL EXPORT/IMPORT STATUS : Not determined for every country. Contact Moorim Chemtech for certification if required.

16. OTHER INFORMATION

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical source. This information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide.

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.
