


SAFETY DATA SHEET (US)**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

<u>1.1 Product identifier</u>	EST SO PROCESS EG BLACK
<u>1.2 Relevant identified uses of the substance or mixture and uses advised against</u>	Printing Ink
<u>1.3 Details of the supplier of the safety data sheet</u>	
MFG.DEPT.	MEGAMI INK MFG.CO.,LTD GUNMA FACTORY Gunma Pref. Annaka City Matsuida-Machi Matsuida 705-1 【TEL】+81-27-393-1718 【FAX】+81-27-393-0530 E-Mail gunkan@megamiink.com
QC.DEPT.	MEGAMI INK MFG.CO.,LTD TOKYO OFFICE TECHNICALCENTER QUALITY ASSURANCE DEPT. 【TEL】+81-48-994-4775 【FAX】+81-48-994-4785 E-Mail hinsho@megamiink.com
<u>1.4Emergency telephone number</u>	【TEL】+81-48-994-4770

2. HAZARDS IDENTIFICATION

<u>2.1 Classification of the substance or mixture</u>	Mixture GHS classification in according with KOSHA (KOREA OCCUPATIONL SAFETY & HEALTH AGENCY)
<u>2.2 Label elements</u>	
SYMBOL	
SIGNAL WORD	Warning
HAZARD STATEMENTS	H332 Harmful if inhaled H319 Cause eye irritation H317 May cause an allergic reaction. H351 Suspected of causing cancer H335 May cause respiratory irritation H373 May cause damage to organs through prolonged or repeated exposure
PRECAUTIONARY STATEMENTS	
PREVENTION	P261 Avoid breathing dust/fumes/gas/mist/vapours/spray. P264 Wash hands thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective glove protective clothing eye, face protection.
RESPONSE	P302/352 If on Skin: Wash with soap and water. P304/340 If Inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305/351/338 If in eyes, rinse cautiously with water for several minutes,remove contact lenses if present and easy to do. P308/313 IF exposed or concerned: Get medical advice/ attention. P333/313 If skin irritation or rash occurs, Get medical advice. P337/313 If eye irritation persists get medical advice/attention
STORAGE	P405 Store looked up.
DISPOSAL	P501 Dispose of contents, container in accordance with applicable Laws and Regulation.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>3.1 Substance</u>	Not applicable
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3.2 Mixture

This product is a mixture.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	Contain %	Cas Number	Hazardous Information
Pigments			
Pigment Black 7	15-20	1333-86-4	H351
Pigment Blue 61	1- 5	1324-76-1	N/A
Resin			
Rosin-modified phenolic resin	15-25	Registered	N/A
Vegetable oil			
Tung oil	20-30	8001-20-5	N/A
Soybean oil		8001-22-7	N/A
Mineral oil			
Petroleum hydrocarbon	15-25	64742-46-7	H332,H319,H335,H373
Additive			
Mixture	5>	136-52-7	H317

4. FIRST AID MEASURES4.1 Description of first aid measures

EYE	If this product comes in contact with the eye wash out immediately with fresh running water. If pain persists or recurs seek medical attention.
SKIN	If skin contact occurs flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.

4. FIRST AID MEASURES

INHALED	If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Transport to hospital, or doctor.
SWALLOWED	If swallowed do not induce vomiting. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5. FIRE FIGHTING MEASURES

<u>5.1 Extinguishing media</u>	Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.
<u>5.2 Special hazards arising from the substance or mixture</u>	Hazardous combustion products.
<u>5.3 Advice for firefighters</u>	Required the use of respiratory protective equipment.

6. ACCIDENTAL RELEASE MEASURES

<u>6.1 Personal precautions, protective equipment and emergency procedures</u>	Wear protective clothing as described.
<u>6.2 Environmental precautions</u>	In the case of contamination of rivers, lakes or drains notify relevant authorities in accordance with local regulations.
<u>6.3 Methods and material for containment and cleaning up</u>	Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate, Clean-up personnel should use respiratory and/or liquid contact protection. Inform Authorities if large amounts are involved.
<u>6.4 Reference to other sections</u>	For waste disposal, see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling Avoid breathing vapors and contact with skin and eyes.
Avoid reaction with oxidizing agents. Avoid sources of heat.
Wear personal protective equipment when handling.
Wash hands with soap and water after handling.

7.2 Conditions for safe storage, including any incompatibilities
Store in a cool place lower than 25°C. Avoid Sun light.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters Petroleum hydrocarbon (Oil mist) ACGIH 2010 (TWA) 5 mg/m³
Carbon black ACGIH 2010 (TWA) 3.5 mg/m³

8.2 Exposure controls
Individual protection measures, such as personal protective equipment.

Respiratory protection Respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

Hand protection Chemical resistant gloves made of Butyl rubber or Polyethylene-polyvinyl alcohol laminated rubber.

Eye/ face protection Safety Glasses with side shields, goggles, or face shield.

Skin and body protection Suitable safety clothes, aprons, shoes and protective boots.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

APPEARANCE Paste

ODOR Slight odor

MELTING POINT No information on the product.

FLASH POINT 140°C

VAPOR PRESSURE No information on the product.

SOLUBILITY Insoluble in water

SPECIFIC GRAVITY 1.10-1.20 (25°C)

N-OCTANOL/WATER IGNITION TEMPERATURE
No information on the product.

PECOMPOSITION TEMPURATURE No information on the product.

VOC PERCENT RANGE 15-25%

9.2 Other information Not determined

10. CHEMICAL STABILITY AND REACTIVITY INFORMATION

10.1 Reactivity There are no known reactivity hazards associated with this product.

10.2 Chemical stability Stable under normal temperature conditions.

10.3 Possibility of hazardous reaction No information on the product.

10.4 Conditions to avoid No information on the product.

10.5 Incompatible materials No information on the product.

10.6 Hazardous decomposition produ No information on the product.

11. TOXICITY INFORMATION11.1. Information on toxicological effects

Acute toxicity (Inhalation) Category4 H332 as concentration of Petroleum Hydrocarbon $\geq 1\%$

Skin corrosion/irritation No information on the product.

Serious eye damage/eye irritation Category2A H319 as concentration of Petroleum Hydrocarbon $\geq 10\%$

Skin Sensitizers Category1 H317 as concentration of Cobalt Compound $\geq 1\%$

Gem cell mutagenicity No information on the product.

Carcinogenicity Category2 H351 as concentration of Carbon black $\geq 0.1\%$

Reproductive toxicity No information on the product.
Specific target organ toxicity exposure Category3 H335 as concentration of Petroleum Hydrocarbon $\geq 10\%$

11. TOXICITY INFORMATION

Specific target organ toxicity Repeated exposure
Category2 H373 as concentration of Petroleum hydrocarbon $\geq 1\%$

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Hazardous to the aquatic environment, Acute hazard No information on the product.
Hazardous to the aquatic environment, Chronic hazard No information on the product.
12.2 Persistence and degradability There are no data on the degradability of this product.
12.3 Bioaccumulative potential No data available on bioaccumulation.
12.4 Mobility in soil No data available.
12.5 Results of PBT and vPvB assessment
Not Classified as PBT/vPvB by current EU criteria.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods Consult manufacturer for recycling options and recycle where possible
consult waste management authority for disposal.
Incinerate residue at an approved site.
Recycle containers where possible or dispose of in an authorized landfill.

14. TRANSPORTATION INFORMATION

14.1 UN number Not applicable
14.2 UN proper shipping name Not applicable
14.3 Transport hazard class Not applicable
14.4 Packing group Not applicable
14.5 Environmental hazards Not applicable
14.6 Special precautions for user Not applicable
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable

15. REGULATORY INFORMATION

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

SARA SECTIONS 313 This Product does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

EPA TOXIC SUBSTANCES CONTROL ACT (TSCA)
All components of these products are included on the 8(b) TSCA inventory list.

California Prop.65 This product contains a chemical known to the State of California to cause cancer.
Carbon Black CAS 1333-86-4 Contain 10-15%
In the IARC classification, Carbon Black to group-2B (Possibly carcinogenic to humans.) but the Printing Ink is group-C (Not classifiable as to its carcinogenicity to humans.).

15.2 Chemical safety assessment No chemical safety assessment has been carried out for this mixture by the supplier.

16. OTHER INFORMATION

Safety Data Sheet (SDS) is intended to provide for general industrial use as reference information in order to ensure the proper handling. It was created on the basis of reliable information but it is not a guarantee of the manufacturer.

Please take your appropriate measures of handling, etc. in their own responsibility.