

## Safety Data Sheet

acc. to OSHA HCS

Printing date 08/24/2022

Reviewed on 08/24/2022

### 1 Identification

- **Product identifier**
- **Trade name:** *C-250J Carbon Screenprint Ink*
- **Application of the substance / the mixture** *Carbon Screenprint Ink*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
*Kayaku Advanced Materials, Inc.*  
*200 Flanders Road*  
*Westborough, MA 01581*  
*Tel: (617) 965-5511*  
*Fax: (617) 965-5818*
- **Information department:**  
*Product Safety*  
*Email: [productsafety@kayakuAM.com](mailto:productsafety@kayakuAM.com)*
- **Emergency telephone number:**  
*Kayaku Advanced Materials : 617-965-5511*  
*Chemtrec USA Emergency : 800-424-9300*  
*Chemtrec International Emergency : 703-527-3887*

### 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carcinogenicity 2      H351 Suspected of causing cancer. Route of exposure: Inhalation.



GHS07

Acute Toxicity - Oral 4      H302 Harmful if swallowed.

Eye Irritation 2A      H319 Causes serious eye irritation.

Sensitization - Skin 1      H317 May cause an allergic skin reaction.

- **Label elements**
- **GHS label elements** *The product is classified and labeled according to the Globally Harmonized System (GHS).*
- **Hazard pictograms**



GHS07



GHS08

- **Signal word** *Warning*
- **Hazard-determining components of labeling:**  
*Synthetic Resin*  
*Proprietary Dye*  
*Carbon black*
- **Hazard statements**  
*H302 Harmful if swallowed.*  
*H319 Causes serious eye irritation.*

(Contd. on page 2)

## Safety Data Sheet

acc. to OSHA HCS

Printing date 08/24/2022

Reviewed on 08/24/2022

**Trade name: C-250J Carbon Screenprint Ink**

(Contd. of page 1)

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer. Route of exposure: Inhalation.

**Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 If swallowed: Immediately call a poison center/doctor.

P302+P352 If on skin: Wash with plenty of soap and water.

P304+P341 If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Classification system:**
**NFPA ratings (scale 0 - 4)**


Health = 2

Fire = 1

Reactivity = 0

**HMIS-ratings (scale 0 - 4)**


Health = 2

Fire = 1

Reactivity = 0

**Other hazards**
**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

### 3 Composition/information on ingredients

**Chemical characterization: Mixtures**
**Description:** Mixture of the substances listed below with nonhazardous additions.

**Dangerous components:**

112-15-2	Diethylene glycol monoethyl ether acetate	45-55%
	⚠ Eye Irritation 2A, H319	
	Synthetic Resin	15-25%
	⚠ Acute Toxicity - Oral 4, H302; Acute Toxicity - Dermal 4, H312	
	Proprietary Dye	15-25%
	⚠ Eye Irritation 2A, H319; Sensitization - Skin 1A, H317	
64742-94-5	Solvent naphtha (petroleum), heavy arom.	5-15%
	⚠ Aspiration Hazard 1, H304	

(Contd. on page 3)

## Safety Data Sheet

acc. to OSHA HCS

Printing date 08/24/2022

Reviewed on 08/24/2022

**Trade name: C-250J Carbon Screenprint Ink**

(Contd. of page 2)

1333-86-4 Carbon black

1-10%



Carcinogenicity 2, H351

### 4 First-aid measures

· **Description of first aid measures**

· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **After eye contact:**

Wash eyes immediately with a large amount of water or normal saline, occasionally lifting upper and lower eye lids until no evidence of chemical remains (about 20 minutes). Remove contact lenses if present and easy to remove. Seek immediate medical attention.

· **After swallowing:**

Do not induce vomiting unless instructed to do so by a physician. Wash out mouth with water and keep person at rest. Seek immediate medical attention.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed** Treat symptomatically.

### 5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

Alcohol resistant foam

Fire-extinguishing powder

Carbon dioxide

· **Special hazards arising from the substance or mixture** No further relevant information available.

· **Advice for firefighters**

· **Protective equipment:** Wear SCBA.

### 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

Keep away from ignition sources

Wear protective equipment. Keep unprotected persons away.

· **Environmental precautions:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

(Contd. on page 4)

## Safety Data Sheet

acc. to OSHA HCS

Printing date 08/24/2022

Reviewed on 08/24/2022

**Trade name: C-250J Carbon Screenprint Ink**

(Contd. of page 3)

### · Protective Action Criteria for Chemicals

<b>· PAC-1:</b>		
112-15-2	Diethylene glycol monoethyl ether acetate	16 mg/m <sup>3</sup>
1333-86-4	Carbon black	9 mg/m <sup>3</sup>
<b>· PAC-2:</b>		
112-15-2	Diethylene glycol monoethyl ether acetate	170 mg/m <sup>3</sup>
1333-86-4	Carbon black	99 mg/m <sup>3</sup>
<b>· PAC-3:</b>		
112-15-2	Diethylene glycol monoethyl ether acetate	1,000 mg/m <sup>3</sup>
1333-86-4	Carbon black	590 mg/m <sup>3</sup>

## 7 Handling and storage

### · Handling:

#### · Precautions for safe handling

Ensure good ventilation/exhaust at the workplace.

Keep away from heat and direct sunlight.

#### · Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Use explosion-proof apparatus / fittings and spark-proof tools.

#### · Conditions for safe storage, including any incompatibilities

#### · Storage:

· **Requirements to be met by storerooms and containers:** No special requirements.

· **Information about storage in one common storage facility:** Store away from oxidizing agents.

#### · Further information about storage conditions:

Keep container well-sealed in cool, dry location.

Protect from exposure to the light.

Protect from heat and direct sunlight.

· **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

### · Control parameters

#### · Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

<b>1333-86-4 Carbon black</b>	
PEL	Long-term value: 3.5 mg/m <sup>3</sup>
REL	Long-term value: 3.5* mg/m <sup>3</sup> *0.1 in presence of PAHs; See Pocket Guide Apps.A+C
TLV	Long-term value: 3* mg/m <sup>3</sup> *inhalable fraction

(Contd. on page 5)

## Safety Data Sheet

acc. to OSHA HCS

Printing date 08/24/2022

Reviewed on 08/24/2022

**Trade name: C-250J Carbon Screenprint Ink**

(Contd. of page 4)

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory equipment:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Material of gloves** Nitrile rubber, NBR
- **Penetration time of glove material** Contact glove manufacture for break-through time.
- **Eye protection:**



Tightly sealed goggles

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	Black
<b>Odor:</b>	Slight
<b>Odor threshold:</b>	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	>70 °C (>158 °F)

- **Flash point:** 101 °C (213.8 °F)

- **Flammability (solid, gaseous):** Not applicable.

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

- **Vapor pressure at 25 °C (77 °F):** 0.1 hPa

- **Density at 20 °C (68 °F):** 1.2 g/cm<sup>3</sup> (10.014 lbs/gal)

- **Relative density** Not determined.

- **Vapor density** Not determined.

(Contd. on page 6)

## Safety Data Sheet

acc. to OSHA HCS

Printing date 08/24/2022

Reviewed on 08/24/2022

**Trade name: C-250J Carbon Screenprint Ink**

(Contd. of page 5)

· <b>Evaporation rate</b>	1.6-2.3 (BuAc=1)
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>VOC content:</b>	0.00 %
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Stable
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid**  
 Contact with incompatible materials.  
 Heat, flames and sparks. Extremes of temperature and direct sunlight.
- **Incompatible materials:** Strong oxidizing agents
- **Hazardous decomposition products:**  
 Carbon monoxide and carbon dioxide  
 Nitrogen oxides (NO<sub>x</sub>)

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**

· <b>IARC (International Agency for Research on Cancer)</b>		
1333-86-4	Carbon black	2B
· <b>NTP (National Toxicology Program)</b>		
None of the ingredients are listed.		
· <b>OSHA-Ca (Occupational Safety &amp; Health Administration)</b>		
None of the ingredients are listed.		

US

(Contd. on page 7)

## Safety Data Sheet

acc. to OSHA HCS

Printing date 08/24/2022

Reviewed on 08/24/2022

**Trade name: C-250J Carbon Screenprint Ink**

(Contd. of page 6)

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
*Water hazard class 2 (Self-assessment): hazardous for water*  
*Do not allow product to reach ground water, water course or sewage system.*  
*Danger to drinking water if even small quantities leak into the ground.*
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
*Must not be disposed of as regular garbage/trash. Do not allow product to reach sewage system.*  
*Disposal must be made in accordance with Federal, State, and Local regulations.*
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made in accordance with Federal, State, and Local regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

· <b>UN-Number</b>	
· <b>DOT, ADR, IMDG, IATA</b>	Not Regulated
· <b>UN proper shipping name</b>	
· <b>DOT, ADR, IMDG, IATA</b>	Not Regulated
· <b>Transport hazard class(es)</b>	
· <b>DOT, ADR, ADN, IMDG, IATA</b>	
· <b>Class</b>	Not Regulated
· <b>Packing group</b>	
· <b>DOT, ADR, IMDG, IATA</b>	Not Regulated
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.

(Contd. on page 8)



## Safety Data Sheet

acc. to OSHA HCS

Printing date 08/24/2022

Reviewed on 08/24/2022

**Trade name: C-250J Carbon Screenprint Ink**

(Contd. of page 7)

· UN "Model Regulation":	Not Regulated
--------------------------	---------------

### 15 Regulatory information

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

· Section 355 (extremely hazardous substances):
---

None of the ingredients are listed.
-------------------------------------

· Section 313 (Specific toxic chemical listings):
---

112-15-2 Diethylene glycol monoethyl ether acetate
--

- TSCA (Toxic Substances Control Act): All ingredients are listed or comply with TSCA regulations.

· Hazardous Air Pollutants
----------------------------

None of the ingredients are listed.
-------------------------------------

· Proposition 65
------------------

· Chemicals known to cause cancer:
------------------------------------

1333-86-4 Carbon black
------------------------

· Chemicals known to cause reproductive toxicity for females:
---

None of the ingredients are listed.
-------------------------------------

· Chemicals known to cause reproductive toxicity for males:
---

None of the ingredients are listed.
-------------------------------------

· Chemicals known to cause developmental toxicity:
--

None of the ingredients are listed.
-------------------------------------

· Carcinogenic categories
---------------------------

· EPA (Environmental Protection Agency)
---

None of the ingredients are listed.
-------------------------------------

· TLV (Threshold Limit Value)
-------------------------------

1333-86-4 Carbon black
------------------------

A4
----

· NIOSH-Ca (National Institute for Occupational Safety and Health)
--

1333-86-4 Carbon black
------------------------

· New Jersey State Right To Know List
---------------------------------------

112-15-2 Diethylene glycol monoethyl ether acetate
--

· Pennsylvania Hazardous Substances List
--

112-15-2 Diethylene glycol monoethyl ether acetate
--

- California SCAQMD Rule 443.1 VOC's: No information available.

- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms



GHS07    GHS08

(Contd. on page 9)



## Safety Data Sheet

acc. to OSHA HCS

Printing date 08/24/2022

Reviewed on 08/24/2022

**Trade name: C-250J Carbon Screenprint Ink**

(Contd. of page 8)

· **Signal word** *Warning*

· **Hazard-determining components of labeling:**

Synthetic Resin  
 Proprietary Dye  
 Carbon black

· **Hazard statements**

H302 Harmful if swallowed.  
 H319 Causes serious eye irritation.  
 H317 May cause an allergic skin reaction.  
 H351 Suspected of causing cancer. Route of exposure: Inhalation.

· **Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapors/spray.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P301+P310 If swallowed: Immediately call a poison center/doctor.  
 P302+P352 If on skin: Wash with plenty of soap and water.  
 P304+P341 If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P332+P313 If skin irritation occurs: Get medical advice/attention.  
 P337+P313 If eye irritation persists: Get medical advice/attention.  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Product safety department

· **Contact:** Tom Cole, EHS Manager (tcole@kayakuAM.com)

· **Revision History:**

The hazard classification and precautionary statements for the mixture in Section 2 were revised.

· **Date of preparation / last revision** 08/24/2022

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 DOT: US Department of Transportation  
 IATA: International Air Transport Association  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 NFPA: National Fire Protection Association (USA)  
 HMIS: Hazardous Materials Identification System (USA)  
 VOC: Volatile Organic Compounds (USA, EU)  
 PBT: Persistent, Bioaccumulative and Toxic  
 vPvB: very Persistent and very Bioaccumulative  
 NIOSH: National Institute for Occupational Safety  
 OSHA: Occupational Safety & Health  
 TLV: Threshold Limit Value  
 PEL: Permissible Exposure Limit  
 REL: Recommended Exposure Limit

(Contd. on page 10)

**Safety Data Sheet**  
**acc. to OSHA HCS**

Printing date 08/24/2022

Reviewed on 08/24/2022

**Trade name: C-250J Carbon Screenprint Ink**

*Acute Toxicity - Oral 4: Acute toxicity – Category 4*  
*Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A*  
*Sensitization - Skin 1: Skin sensitisation – Category 1*  
*Sensitization - Skin 1A: Skin sensitisation – Category 1A*  
*Carcinogenicity 2: Carcinogenicity – Category 2*  
*Aspiration Hazard 1: Aspiration hazard – Category 1*

(Contd. of page 9)

US