

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/15/2021

Reviewed on 02/15/2021

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
- **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**



Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

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



- **Signal word** Warning
- **Hazard statements**
 H332 Harmful if inhaled.
 H315 Causes skin irritation.
- **Precautionary statements**
 P261 Avoid breathing dust/fume/gas/mist/vapors/spray
 P264 Wash hands and face thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P302+P352 If on skin: Wash with plenty of soap and water.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P312 Call a poison center/doctor if you feel unwell.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/15/2021

Reviewed on 02/15/2021

Trade name: C-250J Carbon Screenprint Ink

(Contd. of page 1)

- P332+P313 If skin irritation occurs: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 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 = 1

Fire = 1

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 1

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 Irrit. 2A, H319	
	Synthetic Resin	15-25%
	⚠ Acute Tox. 4, H302; Acute Tox. 4, H312	
	Proprietary Dye	15-25%
	⚠ Eye Irrit. 2A, H319; Skin Sens. 1A, H317	
64742-94-5	Solvent naphtha (petroleum), heavy arom.	5-15%
	⚠ Asp. Tox. 1, H304	
1333-86-4	Carbon black	1-10%
	⚠ Carc. 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.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/15/2021

Reviewed on 02/15/2021

Trade name: C-250J Carbon Screenprint Ink

(Contd. of page 2)

· **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.

· **Protective Action Criteria for Chemicals**

· **PAC-1:**

112-15-2	Diethylene glycol monoethyl ether acetate	16 mg/m ³
1333-86-4	Carbon black	9 mg/m ³

· **PAC-2:**

112-15-2	Diethylene glycol monoethyl ether acetate	170 mg/m ³
1333-86-4	Carbon black	99 mg/m ³

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/15/2021

Reviewed on 02/15/2021

Trade name: C-250J Carbon Screenprint Ink

(Contd. of page 3)

· PAC-3:

112-15-2	Diethylene glycol monoethyl ether acetate	1,000 mg/m ³
1333-86-4	Carbon black	590 mg/m ³

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.

1333-86-4 Carbon black

PEL	Long-term value: 3.5 mg/m ³
REL	Long-term value: 3.5* mg/m ³ *0.1 in presence of PAHs; See Pocket Guide Apps.A+C
TLV	Long-term value: 3* mg/m ³ *inhalable fraction

- **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.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/15/2021

Reviewed on 02/15/2021

Trade name: C-250J Carbon Screenprint Ink

(Contd. of page 4)

· 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:

Form:	Liquid
Color:	Black
Odor:	Slight
Odor threshold:	Not determined.

· **pH-value:** Not determined.

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	>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:

Lower:	Not determined.
Upper:	Not determined.

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

· **Density at 20 °C (68 °F):** 1.2 g/cm³ (10.014 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** 1.6-2.3 (BuAc=1)

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/15/2021

Reviewed on 02/15/2021

Trade name: C-250J Carbon Screenprint Ink

(Contd. of page 5)

· Solubility in / Miscibility with Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
VOC content:	0.00 %
Solids content:	24.0 %
· Other information	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_x)

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**

 · **IARC (International Agency for Research on Cancer)**

1333-86-4 Carbon black

2B

 · **NTP (National Toxicology Program)**

None of the ingredients are listed.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/15/2021

Reviewed on 02/15/2021

Trade name: C-250J Carbon Screenprint Ink

(Contd. of page 6)

 · **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.

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

- | | |
|---|---------------|
| · UN-Number
· DOT, ADR, IMDG, IATA | Not Regulated |
| · UN proper shipping name
· DOT, ADR, IMDG, IATA | Not Regulated |
| · Transport hazard class(es)
· DOT, ADR, ADN, IMDG, IATA
· Class | Not Regulated |
| · Packing group
· DOT, ADR, IMDG, IATA | Not Regulated |

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/15/2021

Reviewed on 02/15/2021

Trade name: C-250J Carbon Screenprint Ink

(Contd. of page 7)

- | | |
|--|-----------------|
| · Environmental hazards: | Not applicable. |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · 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 components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

· 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

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/15/2021

Reviewed on 02/15/2021

Trade name: C-250J Carbon Screenprint Ink

(Contd. of page 8)

· 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

- **Signal word** Warning
- **Hazard statements**
 - H332 Harmful if inhaled.
 - H315 Causes skin irritation.
- **Precautionary statements**
 - P261 Avoid breathing dust/fume/gas/mist/vapors/spray
 - P264 Wash hands and face thoroughly after handling.
 - P271 Use only outdoors or in a well-ventilated area.
 - P280 Wear protective gloves/protective clothing/eye protection/face protection.
 - P302+P352 If on skin: Wash with plenty of soap and water.
 - P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 - P312 Call a poison center/doctor if you feel unwell.
 - P332+P313 If skin irritation occurs: Get medical advice/attention.
 - P362+P364 Take off contaminated clothing and wash it before reuse.
 - 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:** New SDS
- **Date of preparation / last revision** 02/15/2021 / -

· 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)

(Contd. on page 10)

Safety Data Sheet
acc. to OSHA HCS

Printing date 02/15/2021

Reviewed on 02/15/2021

Trade name: C-250J Carbon Screenprint Ink

(Contd. of page 9)

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
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Skin Sens. 1A: Skin sensitisation – Category 1A
Carc. 2: Carcinogenicity – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1

US