

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 03/09/2004

Reviewed on 03/08/2004



1 Identification of substance

- **Product details**
- **Trade name:** *K-BK1 - "K Series" Black Stencil Ink*
- **Article number:** *K-BK-G50, K-BK-G, K-BK-Q, 5A136*
- **Application of the substance / the preparation** *Printing inks*
- **Manufacturer/Supplier:**
*MARSH SHIPPING SUPPLY COMPANY
 COLLINSVILLE ILLINOIS DISTRIBUTION
 926 MCDONOUGH LAKE ROAD - UNIT E
 COLLINSVILLE, IL 62234
 USA*
- **Information department:** *MSDS DEPT.*
- **Emergency information:**
*Chemtrec 800-424-9300
 International 703-527-3887*

2 Composition/Data on components

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

- **Hazardous components**

64742-47-8	Distillates (petroleum), hydrotreated light	 Xn; R 65	78.25%
68475-37-6	glycerol ester of partially polymerized rosin		12.49%
1333-86-4	Carbon black	 Xi; R 36/37	8.63%

- **Additional information:** *For the wording of the listed risk phrases refer to section 16.*

3 Hazards identification

- **Hazard description:**



Xn Harmful

- **Information pertaining to particular dangers for man and environment:**
*The product has to be labelled due to the calculation procedure of international guidelines.
 R 65 Harmful: may cause lung damage if swallowed.*
- **Potential Chronic Health Effects**
Prolonged or repeated exposure of vapors, spray, or material may cause diseases of the lungs. Reports have associated repeated overexposure to solvents with brain and nervous system damage. Intentional misuse of this product may be harmful or fatal.
- **Target Organs**
Overexposure to this material or its components has been suggested as a cause of the following effects in laboratory animals and/or humans, and may aggravate preexisting disorders of these organs in humans: Anemia, Blood disorders, Brain damage, Cardiac function, eye, liver, lung, menstrual and fertility, skin, respiratory, Central Nervous System

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Trade name: **K-BK1 - "K Series" Black Stencil Ink**

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· **Classification system:**

The classification was made according to the latest editions of international substances lists and from component data and msds information

· **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 2

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 1

Fire = 2

Reactivity = 0

4 First aid measures

· **General information:**

Seek immediate medical advice.

Take affected persons out into the fresh air.

Involve doctor immediately.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

Rinse opened eye for fifteen minutes under running water. If irritation persists, consult a doctor.

· **After swallowing:**

If symptoms persist consult doctor.

Do not induce vomiting; immediately call for medical help.

· **Information for doctor:**

· **The following symptoms may occur:**

Breathing difficulty

Headache

Dizziness

Thirst

Cramp

Gastric or intestinal disorders

Coughing

Allergic reactions

Nausea

5 Fire fighting measures

· **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Special hazards caused by the material, its products of combustion or resulting gases:**

Nitrogen oxides (NO_x)

Carbon monoxide (CO)

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- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- **Person-related safety precautions:**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
- **Measures for environmental protection:**
Do not allow product to reach sewage system or any water course.
Do not allow to enter sewers/ surface or ground water.
Prevent from spreading (e.g. by damming-in or oil barriers).
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Dispose of the collected material according to regulations.
- **Additional information:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Store in cool, dry place in tightly closed receptacles.
Keep away from heat and direct sunlight.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Handle with care. Avoid jolting, friction and impact.
Use solvent-proof equipment.
- **Information about protection against explosions and fires:** Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:**
Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.
Do not store together with oxidizing and acidic materials as well as heavy-metal compounds.
Store away from foodstuffs.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Protect from humidity and water.

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Protect from exposure to the light.

8 Exposure controls and personal protection

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

64742-47-8 Distillates (petroleum), hydrotreated light

TLV	200 mg/m ³ As total hydrocarbon vapor; Skin; (P)
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68475-37-6 glycerol ester of partially polymerized rosin

PEL	15 (td) 5 (rf) mg/m ³ 15 mg Total Dust / 5 mg Respirable Fraction
TLV	Short-term value: 3 (rf) 10 (total) mg/m ³

1333-86-4 Carbon black

PEL	3.5 mg/m ³
REL	3.5* mg/m ³ *0.1 in presence of PAHs, as PAHs; 10-hr TWA
TLV	3.5 mg/m ³

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

Pregnant women should strictly avoid inhalation or skin contact.

Do not eat, drink, smoke or sniff while working.

· **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.

· **Protection of hands:**



Protective gloves

· **Material of gloves**

Nitrile rubber, NBR

Nitrile or natural rubber gloves are typically used to protect from minor contact. Butyl type are best for prolonged contact.

· **Eye protection:** Goggles recommended during refilling.

· **Body protection:**

Solvent resistant protective clothing

Impervious protective clothing

Tyvek(R) coveralls to protect from light overspray protection or Saranex 23-P(R) for moderate exposure.

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9 Physical and chemical properties

· General Information

Form:	Fluid
Color:	Black
Odor:	Fusel-like

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 175°C (347°F)

· **Flash point:** 65°C (149°F)

· **Ignition temperature:** 210.0°C (410°F)

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

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

· Explosion limits:

Lower: 0.5 Vol %
Upper: 6.5 Vol %

· **Vapor pressure at 20°C (68°F):** 2.0 hPa (2 mm Hg)

· **Density at 20°C (68°F):** 0.886 g/cm³

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Solvent content:

Organic solvents: 78.2 %
VOC content: 683 g/l

· **Solids content:** 21.8 %

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· **Dangerous reactions** Reacts with acids, alkalis and oxidizing agents.

· Dangerous products of decomposition:

Aldehyde
 Hydrocarbons
 Nitrogen oxides
 Carbon monoxide and carbon dioxide

11 Toxicological information

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

64742-47-8 Distillates (petroleum), hydrotreated light

Oral	LD50	>8000 mg/kg (rat)
Dermal	LD50	>4000 mg/kg (rabbit)

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Inhalative	LC50/4 h	>2500 (PPM) mg/l (rat)
1333-86-4 Carbon black		
Oral	LD50	10000 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:**
Sensitizing effect through inhalation is possible with prolonged exposure.
Sensitizing effect by skin contact is possible with prolonged exposure.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant
Danger through skin absorption.

12 Ecological information

- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
This statement was deduced from the properties of the single components.

13 Disposal considerations

- **Product:**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Hand over to hazardous waste disposers.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Remarks:** Printing Ink Not regulated
- **Land transport ADR/RID (cross-border):**
- **ADR/RID class:** -
- **Remarks:** Printing Ink Not Regulated
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Remarks:** Printing Ink Not Regulated

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- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -
- **Remarks:** Printing Ink Not Regulated

15 Regulations

- **Sara**

- **SARA Title III Section 311/312 - Hazard Communication Standard (40 CFR 370)**

64742-47-8	Distillates (petroleum), hydrotreated light	78,25%
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- **TSCA (Toxic Substances Control Act):**

All ingredients are listed or exempt.

64742-47-8	Distillates (petroleum), hydrotreated light
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68475-37-6	glycerol ester of partially polymerized rosin
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1333-86-4	Carbon black
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8030-76-0	lecethin f (kelcin)
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- **Cancerogenity categories**

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

1333-86-4	Carbon black	2B		8,63%
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- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

1333-86-4	Carbon black	A4		8,63%
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- **NIOSH (National Institute for Occupational Safety and Health)**

1333-86-4	Carbon black	Std 78-204, Guidelines 88-118		8,63%
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- **State regulations**

- **Massachussetts Right-to-know / Hazardous Substance Codes**

1333-86-4	Carbon black	2,4 F5		8,63%
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- **Minnesota Right To Know / Hazardous Substances**

1333-86-4	Carbon black	Codes: ANOR, Carcinogen		8,63%
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- **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

- **Hazard symbols:**

Xn Harmful

- **Hazard-determining components of labelling:**

Distillates (petroleum), hydrotreated light

- **Risk phrases:**

65 Harmful: may cause lung damage if swallowed.

- **Safety phrases:**

23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

25 Avoid contact with eyes.

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- 28 After contact with skin, wash immediately with plenty of soap and water.
33 Take precautionary measures against static discharges.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
51 Use only in well-ventilated areas.
60 This material and its container must be disposed of as hazardous waste.
62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

· National regulations:**· Occupational Safety and Health Act (OSHA)**

Immediate (acute) health hazard

Delayed (chronic) Health Hazard

- Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.**

16 Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

· Relevant R-phrases

36/37 Irritating to eyes and respiratory system.

65 Harmful: may cause lung damage if swallowed.

- Contact: Mike Rickert**

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