Printing date 07/15/2015 Reviewed on 07/15/2015

1 Identification

· Product identifier

· Trade name: 70900BK EFI Black Water Soluable Stencil Ink

· Article number: 70900BK, 70887, 70903

· Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

· Application of the substance / the mixture Printing inks

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Marsh Shipping Supply Co.,LLC 926 McDonough Lake Road - Unit E Collinsville, IL 62234 USA

· Information department: customerservice@msscllc.com

· Emergency telephone number:

Infotrac: 1-800-535-5053

International; 352-323-3500 (CALL COLLECT)

2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

· Additional information:

The pigment Carbon Black CAS# 1333-86-4, is suspected of causing cancer when inhaled as a dust form. This pigment is bound in the ink, and under normal conditions of use the exposure to the dust form is not likely.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms GHS08
- · Signal word Warning
- · Hazard-determining components of labeling:

Carbon black

· Hazard statements

Suspected of causing cancer.

· Precautionary statements

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

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

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

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Safety Data Sheet acc. to OSHA HCS

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· HMIS-ratings (scale 0 - 4)

HEALTH1Health=1FIRE1Fire=1REACTIVITY 0Reactivity=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.
- · Hazardous components

1333-86-4 Carbon black

🕸 Carc. 2, H351

5.0%

· Additional information:

This prodct contains pigments which may become a dust nuisance when removed by abrasive blasting or sanding. Airborne nuisance particulates have an ACGIH TLV for total dust of 10mg/M3

4 First-aid measures

- · Description of 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 rinse with water for 15 minutes. If irritation exists call physcian.
- · After eye contact:

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

- · After swallowing: Do not induce vomiting; immediately call for medical help.
- · Most important symptoms and effects, both acute and delayed

Dizziness

Disorientation

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.

· Special hazards arising from the substance or mixture

Nitrogen oxides (NOx)

Carbon monoxide (CO)

- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

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· 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

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: 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

No dangerous substances are released.

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

- · Precautions for safe handling Keep receptacles tightly sealed.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Only store in heated receptacles.
- · Information about storage in one common storage facility:

Do not store together with oxidizing and acidic materials as well as heavy-metal compounds. Store away from foodstuffs.

- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Control parameters
- · Components with limit values that require monitoring at the workplace:

1333-86-4 Carbon black

PEL Long-term value: 3.5 mg/m³

REL Long-term value: 3.5* mg/m³

*0.1 in presence of PAHs; See Pocket Guide Apps.A+C

TLV Long-term value: 3* mg/m³

*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:

The usual precautionary measures for handling chemicals should be followed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

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

Breathing equipment:

Use suitable respiratory protective device in case of insufficient ventilation.

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Use only with adequate ventillatiion.
• Protection of hands: Neoprene gloves

- Eye protection: Goggles recommended during refilling. Body protection: Protective work clothing

| Information on basic physical and c | hemical properties | |
|---------------------------------------|---|--|
| General Information | | |
| Appearance: | | |
| Form: | Fluid | |
| Color: | Black | |
| Odor: | Alcohol-like | |
| Odour threshold: | Not determined. | |
| pH-value: | Not determined. | |
| Change in condition | | |
| Melting point/Melting range: | Undetermined. | |
| Boiling point/Boiling range: | 100 °C (212 °F) | |
| Flash point: | 110 °C (230 °F) | |
| Flammability (solid, gaseous): | Not applicable. | |
| Ignition temperature: | | |
| 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 20 °C (68 °F): | 23 hPa (17 mm Hg) | |
| Density at 20 °C (68 °F): | 1.03576 g/cm³ (8.643 lbs/gal) | |
| Relative density | Not determined. | |
| Vapour density | Not determined. | |
| Evaporation rate | Not determined. | |
| Solubility in / Miscibility with | | |
| Water: | Easily soluble. | |
| Partition coefficient (n-octanol/wate | e r): Not determined. | |
| Viscosity: | | |
| Dynamic: | Not determined. | |
| Kinematic: | Not determined. | |
| Solvent content: | - | |
| Organic solvents: | 3.8 % | |
| Water: | 70.7 % | |
| VOC content: | 3.8 % | |
| | 146.8 g/l / 1.23 lb/gl | |
| Solids content: | 25.7 % | |

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· Other information

No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions Reacts with acids, alkalis and oxidizing agents.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:

1333-86-4 Carbon black

Oral LD50 10000 mg/kg (rat)

- · 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 (Inte | rnational Agency for Research on Cancer) | | |
|--------------|--|----|---------|
| 1333-86-4 | Carbon black | 2B | 5.0% |
| 141-32-2 | n-butyl acrylate | 3 | 0.0004% |
| 100-42-5 | styrene | 2B | 0.0004% |
| · NTP (Natio | onal Toxicology Program) | | |
| 100 42 5 | tyrono | P | 0.0004% |

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional 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.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

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· Other adverse effects No further relevant information available.

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13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers.

This material and containers that are not empty, if discarded, would be regulated as a hazardous waste under RCRA. Treatment and disposal must be completed at a RCRA permitted treatment, storage, and disposal facility (TSD). The storage and transportation of RCRA hazardous wastes are also regulated by the USEPA.

- · Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.

| 4 Transport information | |
|---|---|
| · UN-Number · DOT, ADR, ADN, IMDG, IATA | Void |
| · UN proper shipping name · DOT, ADR, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) | |
| · DOT, ADR, ADN, IMDG, IATA · Class | Void |
| · Packing group · DOT, ADR, IMDG, IATA | Void |
| · Environmental hazards: | Not applicable. |
| · Special precautions for user | Bulk packaging may be regulated / classified differently than nor bulk depending on mode of transport |
| · Transport in bulk according to Annex MARPOL73/78 and the IBC Code | II of Not applicable. |
| · UN ''Model Regulation'': | - |

15 Regulatory information

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

| · Sura | | |
|-------------|--|---------|
| · Section 3 | 13 (Specific toxic chemical listings): | |
| 533-74-4 | dazomet (ISO) | 0.04% |
| 141-32-2 | n-butyl acrylate | 0.0004% |
| 100-42-5 | styrene | 0.0004% |
| · SARA Ti | tle III Section 311/312 - Hazard Communication Standard (40 CFR 370) | |
| 108-01-0 | 2-dimethylaminoethanol | 0.3% |
| 533-74-4 | dazomet (ISO) | 0.04% |
| 100-42-5 | styrene | 0.0004% |
| | | . 1 |

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| RCRA: Resource Conservation and Recovery Act / Code | | | (C | ontd. o | ı pag |
|--|-------------------|---------------|-----------------|--------------|----------------------|
| 533-74-4 dazomet (ISO) | | | I.I. | 366 (| 0 04 |
| TSCA (Toxic Substances Control Act): | | | | | ,,,, |
| All ingredients are listed or exempt. | | | | | |
| 990001-16-3 polymer | | | | | |
| 1333-86-4 Carbon black | | | | | |
| 29911-28-2 Dipropylene Glycol Monobutyl Ether | | | | | |
| 108-01-0 2-dimethylaminoethanol | | | | | |
| 533-74-4 dazomet (ISO) | | | | | |
| 141-32-2 n-butyl acrylate | | | | | |
| 100-42-5 styrene | | | | | |
| 7732-18-5 water, distilled, conductivity or of similar purit | ty. | | | | |
| Notification is required t-Butylcatechol (CAS # 98-29-3) p-Methoxyphenol (CAS # 150-76-5) Proposition 65 / Chemicals known to cause cancer: 1333-86-4 Carbon black | | | | | 5.0 |
| Clean Air Act- Hazardous Air Pollutants | | | | | 5.0 |
| 108-01-0 2-dimethylaminoethanol | | | SOCMI | 0 | 0.3% |
| 100-42-5 styrene | | | SOCMI XO | | |
| * | | | восит хо | v 0.0 | 00- |
| Clean Water Act: Section 311(b)(2)(A) & Priority Pollutants 100-42-5 styrene | S | | BO: 1000 II | - 0.0 | 000 |
| • | | | RQ: 1000 lb | \$ 0.0 | 'UU2 |
| Cancerogenity categories TLV (Threshold Limit Value established by ACGIH) | | | | | |
| 1333-86-4 Carbon black | | | A | 4 5 | .0% |
| 141-32-2 n-butyl acrylate | | | | 4 0.0 | |
| 100-42-5 styrene | | | A | | |
| , , , , , , , , , , , , , , , , , , , | alth) | | 11 | , 0.0 | |
| NIOSH (National Institute for Occupational Safety and Heal 1333-86-4 Carbon black | <i>uun)</i> * | | | 5 | 5.0% |
| 100-42-5 styrene | | .J. 92 110 C. | iidelines 81-12 | | |
| I i | Sianaar | a. 65-119, Gu | iluelines 01-12 | 3 0.0 | 002 |
| CERCLA- SARA Title III: 40 CFR Part 302, Table 302.4 | | | 100 | | 0.4 |
| 533-74-4 dazomet (ISO) | | | ## pounds | | .049 |
| 100-42-5 styrene | | | RQ: 1000 lb | $s \mid 0.0$ | 1004 |
| State regulations | | | | | |
| New Jersey Right-to-know | | D 05 0500 | g 1 370 266 | 4 0 | 0.4 |
| 500 54 4 1 | | | Sub NO>: 366 | | .049 |
| 533-74-4 dazomet (ISO) | | DOT: 2055, | Sub No: 1748 | 0.0 | 1004 |
| 100-42-5 styrene | | _ | | | |
| 100-42-5 styrene Massachussetts Right-to-know / Hazardous Substance Code | ?S | | | | |
| 100-42-5 styrene Massachussetts Right-to-know / Hazardous Substance Code 1333-86-4 Carbon black | ?S | 2,4 F5 | | | |
| 100-42-5 styrene Massachussetts Right-to-know / Hazardous Substance Code 1333-86-4 Carbon black 108-01-0 2-dimethylaminoethanol | ?S | 6 | | 0 | 0.3% |
| 100-42-5 styrene Massachussetts Right-to-know / Hazardous Substance Code 1333-86-4 Carbon black | 28 | 6 | 9 *E*C* F7 F | 0 | 5.0% 0.3% 0004 |

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|---|--------------------------------|
| · Pennsylvania Hazardous Substances | |
| 108-01-0 2-dimethylaminoethanol | 0.3% |
| 100-42-5 styrene | E 0.0004 |
| Michigan Hazardous Substance | |
| 100-42-5 styrene | 0.0004 |
| Pennsylvania Non-hazardous present at 3% or greater (PA | 3) |
| 100-42-5 styrene | 0.0004 |
| Minnesota Right To Know / Hazardous Substances | |
| 1333-86-4 Carbon black | Codes: ANOR, Carcinogen 5.0% |
| 100-42-5 styrene | ANO 0.0004 |
| Michigan Critical Material List | |
| 100-42-5 styrene | 0.0004 |
| New York Right To Know / Hazardous Substances | |
| 100-42-5 styrene | RQ Air: 1000, RQ Land 1 0.0004 |
| Illinois Right To Know | |
| 533-74-4 dazomet (ISO) | ı |
| 100-42-5 styrene | |

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms GHS08
- · Signal word Warning
- · Hazard-determining components of labeling:

Carbon black

· Hazard statements

Suspected of causing cancer.

· Precautionary statements

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

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

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

- · National regulations:
- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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 phrases

H351 Suspected of causing cancer.

- · Contact: Compliance Department
- · Date of preparation / last revision 07/15/2015 / -

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· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord européen sur le transport 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

ACGIH: American Conference of Governmental Industrial Hygienists 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) Carc. 2: Carcinogenicity, Hazard Category 2

USA