Matthews Marking Systems™

digital design

SAFETY DATA SHEET
4710BK

1. Identification

Product identifier

Product name 4710BK

Recommended use of the chemical and restrictions on use

Application Printing ink.

Uses advised against Use only for intended applications.

Details of the supplier of the safety data sheet

Supplier

Digital Design
A Matthews International Company
67 Sand Park Rd
Cedar Grove, NJ 07009
973-957-9500
800-967-7746

Emergency telephone number

Emergency telephone

ChemTel Inc. 800-255-3924
Worldwide Intl. 813-248-0585

2. Hazard(s) identification

Classification of the substance or mixture

OSHA Regulatory Status This Product is Hazardous under the OSHA Hazard Communication Standard.

Physical hazards Flam. Liq. 2 - H225

Health hazards Acute Tox. 3 - H301 Acute Tox. 3 - H311 Eye Dam. 1 - H318 Carc. 1B - H350 STOT SE 1 - H370

Environmental hazards Not Classified

Label elements

Pictogram

Signal word Danger

Hazard statements

H225 Highly flammable liquid and vapor.
H301+H311 Toxic if swallowed or in contact with skin.
H318 Causes serious eye damage.
H350 May cause cancer.
H370 Causes damage to organs .

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Precautionary statements P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 If exposed or concerned: Get medical advice/ attention.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/ container in accordance with national regulations.

Contains Methanol, Proprietary Ester, Naphthalene

3. Composition/information on ingredients

Mixtures

Methanol **30-<50%**

CAS number: 67-56-1

Classification
Flam. Liq. 2 - H225
Acute Tox. 3 - H301
Acute Tox. 3 - H311
Acute Tox. 3 - H331
STOT SE 1 - H370

Ethanol **30-<50%**

CAS number: 64-17-5

Classification
Flam. Liq. 2 - H225
Eye Irrit. 2A - H319

Black Dye **5-<10%**

CAS number: Proprietary

Classification
Eye Irrit. 2A - H319
Aquatic Chronic 3 - H412

Proprietary Ester **1-<5%**

CAS number: Proprietary

Classification
Acute Tox. 4 - H302
Eye Dam. 1 - H318
STOT SE 3 - H336

Proprietary Ketone **1-<5%**

CAS number: Proprietary

Classification
Flam. Liq. 2 - H225
Eye Irrit. 2A - H319
STOT SE 3 - H336

Isopropanol **1-<5%**

CAS number: 67-63-0

Classification
Flam. Liq. 2 - H225
Eye Irrit. 2A - H319
STOT SE 3 - H336

2-Naphthol **<1%**

CAS number: 135-19-3

M factor (Acute) = 1

Classification
Acute Tox. 4 - H302
Acute Tox. 4 - H332
Eye Irrit. 2A - H319
Aquatic Acute 1 - H400

Naphthalene **<1%**

CAS number: 91-20-3

M factor (Acute) = 1 M factor (Chronic) = 1

Classification
Flam. Liq. 4 - H227
Acute Tox. 4 - H302
Carc. 2 - H351
STOT RE 1 - H372
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

The full text for all hazard statements is displayed in Section 16.

4. First-aid measures

Description of first aid measures

General information Consult a physician for specific advice. If medical advice is needed, have product container or label at hand. If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention immediately.

Ingestion	Get medical attention immediately. Do not induce vomiting unless under the direction of medical personnel. Never give anything by mouth to an unconscious person.
Skin Contact	Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing. Wash clothing and clean shoes thoroughly before reuse.
Eye contact	Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

Most important symptoms and effects, both acute and delayed

General information	The product is considered to be a low hazard under normal conditions of use. The severity of the symptoms described will vary dependent on the concentration and the length of exposure. See Section 11 for additional information on health hazards.
Inhalation	May be harmful if inhaled. Vapor may affect central nervous system. Vapours may cause drowsiness and dizziness. Vapors irritate the respiratory system.
Ingestion	Harmful if swallowed. May cause nausea, headache, dizziness and intoxication.
Skin contact	Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.
Eye contact	This product is moderately irritating. Symptoms following overexposure to vapor may include the following: Severe irritation, burning, tearing and blurred vision.

Indication of immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Water spray.

Special hazards arising from the substance or mixture

Flammability Class	7.1 Flammable Liquid IB.
Specific hazards	Flammable liquid and vapour. Vapors are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO2). Carbon monoxide (CO).

Advice for firefighters

Protective actions during firefighting	Evacuate area. Stop leak if safe to do so. Use water to keep fire exposed containers cool and disperse vapors. Use water spray to reduce vapors.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	No smoking, sparks, flames or other sources of ignition near spillage. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapors. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place.

Environmental precautions

Environmental precautions Avoid release to the environment. Do not discharge into drains or watercourses or onto the ground. Use appropriate containment to avoid environmental contamination. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. Stop leak if safe to do so. Do not touch or walk into spilled material. Take care as floors and other surfaces may become slippery. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely. When handling waste, the safety precautions applying to handling of the product should be considered. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions Wear protective clothing as described in Section 8 of this safety data sheet.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. Provide eyewash station and safety shower. Good personal hygiene procedures should be implemented. Wash skin thoroughly after handling. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage precautions Store at temperatures between 4.4°C/40°F and 32.2°C/90°F. Keep only in the original container in a cool, well-ventilated place. Protect from freezing and direct sunlight. Container must be kept tightly closed when not in use. Keep containers upright. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in accordance with national regulations.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

Methanol

Long-term exposure limit (8-hour TWA): OSHA 200 ppm 260 mg/m³
Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 262 mg/m³
Short-term exposure limit (15-minute): ACGIH 250 ppm 328 mg/m³
Sk

Ethanol

Long-term exposure limit (8-hour TWA): OSHA 1000 ppm 1900 mg/m³
Short-term exposure limit (15-minute): ACGIH 1000 ppm 1880 mg/m³

Black Dye

No exposure limit value known.

Proprietary Ketone

Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 590 mg/m³
Long-term exposure limit (8-hour TWA): OSHA 200 ppm 590 mg/m³
Short-term exposure limit (15-minute): ACGIH 300 ppm 885 mg/m³

Isopropanol

Long-term exposure limit (8-hour TWA): OSHA 400 ppm 980 mg/m³
Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 492 mg/m³
Short-term exposure limit (15-minute): ACGIH 400 ppm 984 mg/m³
A4

Naphthalene

Long-term exposure limit (8-hour TWA): OSHA 10 ppm 50 mg/m³
Long-term exposure limit (8-hour TWA): ACGIH 10 ppm 52 mg/m³
A3, DSens, Sk

OSHA = Occupational Safety and Health Administration.
ACGIH = American Conference of Governmental Industrial Hygienists.
A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.
Sk = Danger of cutaneous absorption.
A4 = Not Classifiable as a Human Carcinogen.
DSens = Dermal sensitizer.

Ingredient comments Data based on literature. Product not tested.

Methanol (CAS: 67-56-1)

Immediate danger to life and health	6000 ppm

Isopropanol (CAS: 67-63-0)

Immediate danger to life and health	2000 ppm

Proprietary Ketone

Immediate danger to life and health	3000 ppm

Naphthalene (CAS: 91-20-3)

Immediate danger to life and health	250 ppm

Exposure controls

Protective equipment

Appropriate engineering controls As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapor or mist. Use explosion-proof ventilating equipment.

Eye/face protection Wear tight-fitting, chemical splash goggles or face shield.

Hand protection	It is recommended that chemical-resistant, impervious gloves are worn. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. It is recommended that gloves are made of the following material: Butyl rubber. Nitrile rubber. Rubber (natural, latex). Frequent changes are recommended.
Other skin and body protection	Avoid contact with skin. Wear appropriate clothing to prevent repeated or prolonged skin contact.
Hygiene measures	Wash contaminated skin thoroughly after handling. Provide eyewash station and safety shower.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Organic vapor filter.
Thermal hazards	If there is a risk of contact with hot product, all protective equipment worn should be suitable for use with high temperatures.
Environmental exposure controls	Keep container tightly sealed when not in use. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Colored liquid.
Color	Black.
Odor	Alcoholic.
Melting point	-89°C/-128°F
Initial boiling point and range	63°C/147°F @ 760 mm Hg
Flash point	4°C/40°F CC (Closed cup).
Evaporation rate	8.3 (diethyl ether = 1)
Upper/lower flammability or explosive limits	Upper flammable/explosive limit: 19 % vol Lower flammable/explosive limit: 1.4 % vol
Vapor pressure	42.9 mm Hg @ 20°C/68°F
Vapor density	1.5
Relative density	0.70-0.90
Solubility(ies)	Soluble in the following materials: Alcohols. Soluble in water.
Partition coefficient	log Pow: -0.3
Auto-ignition temperature	398°C/750°F
Decomposition Temperature	Not applicable.
Explosive properties	Not applicable.
Oxidizing properties	Not applicable.
Comments	Information given is applicable to the product as supplied. Information declared as "Not available" or "Not applicable" is not considered to be relevant to the implementation of the proper control measures.

10. Stability and reactivity

Reactivity	There are no known reactivity hazards associated with this product.
Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	The following materials may react with the product: Strong oxidizing agents.
Conditions to avoid	Avoid the following conditions: Heat, sparks, flames.
Materials to avoid	Avoid contact with the following materials: Strong oxidizing agents.
Hazardous decomposition products	Heating may generate the following products: Carbon dioxide (CO2). Carbon monoxide (CO).

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)	100.0

Acute toxicity - dermal

ATE dermal (mg/kg)	300.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l)	22.83

Specific target organ toxicity - single exposure

Target organs	Eyes Gastro-intestinal tract Respiratory system, lungs Skin

Specific target organ toxicity - repeated exposure

Target organs	Blood Central nervous system Gastro-intestinal tract Kidneys Liver Skin

Aspiration hazard

Aspiration hazard	Not relevant.

Toxicological information on ingredients.

Methanol

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	143.0
Species	Human
Notes (oral LD_{50})	LDLO - 143 mg/kg, Oral, Human LD_{50} 1187 - 2769 mg/kg, Oral, Rat
ATE oral (mg/kg)	143.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	1,000.0
Species	Rabbit
Notes (dermal LD_{50})	LD_{50} 17100 mg/kg, Dermal, Rabbit
ATE dermal (mg/kg)	1,000.0

Acute toxicity - inhalation

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Acute toxicity inhalation (LC_{50} vapours mg/l)	10.0
Species	Rat
Notes (inhalation LC_{50})	LC_{50} 87.6 - 6 h mg/l, Inhalation, Rat LC_{50} 128.2 - 4 h mg/l, Inhalation, Rat
ATE inhalation (vapours mg/l)	10.0

Carcinogenicity

Carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen
IARC carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen
NTP carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen

Specific target organ toxicity - single exposure

STOT - single exposure	A single exposure may cause the following adverse effects: Difficulty in breathing. Nausea, vomiting. Diarrhea.
Target organs	Gastro-intestinal tract Respiratory system, lungs Respiratory tract

Ethanol

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	3,450.0
Species	Rat
ATE oral (mg/kg)	3,450.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	15,800.0
Species	Rabbit
ATE dermal (mg/kg)	15,800.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	30,000.0
Species	Rat
ATE inhalation (vapours mg/l)	30,000.0

Serious eye damage/irritation

Serious eye damage/irritation	Causes eye irritation.

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Carcinogenicity

Carcinogenicity	Ethyl alcohol is only considered a carcinogenic and developmental hazard when ingested as an alcoholic beverage.
IARC carcinogenicity	IARC Group 1 Carcinogenic to humans.
NTP carcinogenicity	Known carcinogen.
OSHA Carcinogenicity	Listed as a carcinogen under OSHA

Black Dye

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	2,001.0
Species	Rat
ATE oral (mg/kg)	2,001.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,001.0
Species	Rat
ATE dermal (mg/kg)	2,001.0

Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye damage.

Proprietary Ester

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	1,540.0
Species	Rat
ATE oral (mg/kg)	1,540.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	5,100.01
Species	Rat
ATE inhalation (vapours mg/l)	5,100.01

Proprietary Ketone

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	2,600.0
Species	Rat

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ATE oral (mg/kg)	2,600.0
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	6,400.0
Species	Rabbit
ATE dermal (mg/kg)	6,400.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} vapours mg/l)	32,000.0
Species	Mouse
ATE inhalation (vapours mg/l)	32,000.0
Serious eye damage/irritation	
Serious eye damage/irritation	Causes serious eye irritation.

Isopropanol

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	5,045.0
Species	Rat
ATE oral (mg/kg)	5,045.0
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	12,800.0
Species	Rabbit
ATE dermal (mg/kg)	12,800.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} vapours mg/l)	73.0
Species	Rat
ATE inhalation (vapours mg/l)	73.0
Serious eye damage/irritation	
Serious eye damage/irritation	Causes serious eye irritation.

2-Naphthol

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	1,960.0

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Species	Rat
ATE oral (mg/kg)	1,960.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,001.0
Species	Rat
ATE dermal (mg/kg)	2,001.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} dust/mist mg/l)	3.0
Species	Rat
ATE inhalation (dusts/mists mg/l)	3.0

Serious eye damage/irritation

Serious eye damage/irritation	Causes eye irritation.

Naphthalene

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	1,110.0
Species	Rat
ATE oral (mg/kg)	1,110.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	5,010.0
Species	Rabbit
ATE dermal (mg/kg)	5,010.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} dust/mist mg/l)	340.0
Species	Rat
ATE inhalation (dusts/mists mg/l)	340.0

Carcinogenicity

IARC carcinogenicity	IARC Group 2B Possibly carcinogenic to humans.
NTP carcinogenicity	Reasonably anticipated to be a human carcinogen.

Specific target organ toxicity - repeated exposure

Target organs	Blood

12. Ecological Information

Ecological information on ingredients.

Methanol

Acute toxicity - fish	NOEC, 200 hours: 7,900 mg/l, Oryzias latipes (Red killifish) LC_{50}, 96 hours: 15,400 mg/l, Lepomis macrochirus (Bluegill)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: > 10,000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 96 hours: 22,000 mg/l, Selenastrum capricornutum

Ethanol

Acute toxicity - fish	LC_{50}, 96 hours: 14,200 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	NOEC, 9 days: 9.6 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 275 mg/l, Freshwater algae

Black Dye

Acute toxicity - fish	LL_{50}, 96 hours: > 100 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	LL_{50}, 48 hours: > 100 mg/l, Daphnia magna
Chronic toxicity - fish early life stage	NOEC, : >= 100 mg/l, Onchorhynchus mykiss (Rainbow trout)
Chronic toxicity - aquatic invertebrates	NOEC, : >= 100 mg/l, Daphnia magna

Proprietary Ester

Acute toxicity - fish	LC_{50}, 96 hours: 220 mg/l, Leuciscus idus (Golden orfe)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 500 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 96 hours: 79 mg/l, Desmodesmus subspicatus

Proprietary Ketone

Acute toxicity - fish	LC_{50}, : 1690 mg/l, Lepomis macrochirus (Bluegill) LC_{50}, : 3220 mg/l, Pimephales promelas (Fat-head Minnow)

Isopropanol

Acute toxicity - fish	LC_{50}, 96 hours: 9640 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC_{50}, 24 hours: 5102 mg/l, Daphnia magna

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Acute toxicity - aquatic plants	EC_{50}, 72 hours: > 2000 mg/l, Desmodesmus subspicatus EC_{50}, 24 hours: > 1000 mg/l, Algae

2-Naphthol

Acute aquatic toxicity

$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC_{50}, 96 hours: 0.96 mg/l, Pimephales promelas (Fat-head Minnow)

Naphthalene

Acute aquatic toxicity

$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC_{50}, 96 hours: 0.91 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 1.09 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 0.4 mg/l, Selenastrum capricornutum

Chronic aquatic toxicity

M factor (Chronic)	1

Persistence and degradability

Ecological information on ingredients.

Methanol

Biodegradation	The substance is readily biodegradable. Soil - Degradation 72%: 5 days
Biological oxygen demand	600-1,120 g O_2/g substance
Chemical oxygen demand	1,420 mg O_2/l

Black Dye

Persistence and degradability	The product is not readily biodegradable.
Biodegradation	Soil - Degradation 0%: 28 days

Isopropanol

Persistence and degradability	The product is readily biodegradable.
Biological oxygen demand	1.19 g O_2/g substance
Chemical oxygen demand	2.23 g O_2/g substance

2-Naphthol

Persistence and degradability	The product is readily biodegradable.
Biodegradation	Soil - Degradation 92%: 15 days

Bioaccumulative potential

Partition coefficient log Pow: -0.3

Ecological information on ingredients.

Methanol

Bio-Accumulative Potential BCF: 5 mg/l, Cyprinus carpio (Common carp)

Ethanol

Partition coefficient log Pow: -0.32

Isopropanol

Partition coefficient log Pow: 0.05

Naphthalene

Bio-Accumulative Potential BCF: 168, Fish

13. Disposal considerations

Waste treatment methods

General information The generation of waste should be minimized or avoided wherever possible. When handling waste, the safety precautions applying to handling of the product should be considered. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Dispose of waste product or used containers in accordance with local regulations Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

Disposal methods Dispose of contents/container in accordance with national regulations. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. When handling waste, the safety precautions applying to handling of the product should be considered.

14. Transport information

UN Number

UN No. (TDG) 1210

UN No. (IMDG) 1210

UN No. (ICAO) 1210

UN No. (DOT) 1210

UN proper shipping name

Proper shipping name (TDG) PRINTING INK

Proper shipping name (IMDG) PRINTING INK

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Proper shipping name (ICAO) PRINTING INK

Proper shipping name (DOT) PRINTING INK

Transport hazard class(es)

TDG class 3

TDG label(s) 3

IMDG Class 3

ICAO class/division 3

Transport labels

Packing group

TDG Packing Group II

IMDG packing group II

ICAO packing group II

DOT packing group II

Environmental hazards

Environmentally Hazardous Substance
No.

Special precautions for user

EmS F-E, S-D

15. Regulatory information

Regulatory Status Hazardous Chemical

Regulatory References OSHA Hazard Communication Standard, 29 CFR 1910.1200

US Federal Regulations

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

Methanol
Final CERCLA RQ: 5000(2270) pounds (Kilograms)

Proprietary Ketone
Final CERCLA RQ: 5000(2270) pounds (Kilograms)

Naphthalene
Final CERCLA RQ: 100(45.4) pounds (Kilograms)

SARA 313 Emission Reporting

Methanol

Isopropanol

Naphthalene

SARA (311/312) Hazard Categories

Methanol

Fire
Acute
Chronic

Ethanol

Acute
Chronic
Fire

Black Dye

Acute

Proprietary Ketone

Fire
Acute
Chronic

Isopropanol

Acute
Chronic
Fire

Naphthalene

Acute
Chronic
Fire

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

Methanol

Known to the State of California to cause developmental and reproductive toxicity.

Ethanol

Known to the State of California to cause cancer and developmental reproductive toxicity.

Naphthalene

Known to the State of California to cause cancer.

California Air Toxics "Hot Spots" (A-I)

Methanol

Proprietary Ketone

Isopropanol

Naphthalene

California Directors List of Hazardous Substances

The following ingredients are listed or exempt:

Methanol

Ethanol

Proprietary Ketone

Isopropanol

Naphthalene

Massachusetts "Right To Know" List

The following ingredients are listed or exempt:

Methanol

Ethanol

Proprietary Ketone

Isopropanol

Naphthalene

Rhode Island "Right To Know" List

The following ingredients are listed or exempt:

Methanol

Ethanol

Proprietary Ketone

Isopropanol

Naphthalene

Minnesota "Right To Know" List

The following ingredients are listed or exempt:

Methanol

Ethanol

Proprietary Ketone

Isopropanol

Naphthalene

New Jersey "Right To Know" List

The following ingredients are listed or exempt:

Methanol

Ethanol

Proprietary Ketone

Isopropanol

Naphthalene

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

Methanol

Ethanol

Proprietary Ketone

Isopropanol

Naphthalene

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

Canada - DSL/NDSL

All the ingredients are listed or exempt.

US - TSCA

All the ingredients are listed or exempt.

Australia - AICS

Methanol

Ethanol

Proprietary Ester

Proprietary Ketone

Isopropanol

Naphthalene

Japan - MITI

Methanol

Ethanol

Proprietary Ester

Proprietary Ketone

Isopropanol

Naphthalene

Korea - KECI

Methanol

Ethanol

Proprietary Ester

Proprietary Ketone

Isopropanol

Naphthalene

China - IECSC

Methanol

Ethanol

Proprietary Ester

Proprietary Ketone

Isopropanol

Naphthalene

Philippines - PICCS

Methanol

Ethanol

Proprietary Ester

Proprietary Ketone

Isopropanol

Naphthalene

New Zealand - NZIOC

Methanol

Ethanol

Proprietary Ester

Proprietary Ketone

Isopropanol

Naphthalene

Taiwan - NECI

Methanol

Ethanol

Proprietary Ester

Proprietary Ketone

Isopropanol

Naphthalene

16. Other information

Issued by	Matthews Marking Systems - Chemical Services Department
Revision date	8/6/2018
Revision	1
SDS No.	5972
SDS status	Approved.
Hazard statements in full	H225 Highly flammable liquid and vapor. H227 Combustible liquid. H301 Toxic if swallowed. H302 Harmful if swallowed. H311 Toxic in contact with skin. H318 Causes serious eye damage. H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. H350 May cause cancer. H351 Suspected of causing cancer. H370 Causes damage to organs . H372 Causes damage to organs (Blood) through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.
NFPA - instability hazard	Normally stable. (0)
ACA HMIS Health rating.	Moderate hazard. (2)
NFPA - health hazard	Irritation, minor residual injury. (1)
NFPA - flammability hazard	Ignites easily. (3)
ACA HMIS Flammability rating.	Ignites easily. (3)
ACA HMIS Physical hazard rating.	Normally stable. (0)

4710BK

ACA HMIS Personal protection rating.	B