SAFETY DATA SHEET
DPI-419 Special Red Ink

SECTION 1: Identification: Product identifier and chemical identity

Product identifier

Product name DPI-419 Special Red Ink

Product No. 71002037, 71002039

Container size 6 x 1 Liter, 5 Gallon Pail

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

Application Printing ink.

Uses advised against Use only for intended applications.

Details of the supplier of the safety data sheet

Supplier
Matthews Marking Systems
3159 Unionville Road, Suite 500
Cranberry Township, PA 16066
412.665.2500
412.828.4545
info@matw.com

Manufacturer
Matthews Marking Systems
Zona Franca La Lima
Multitenant #8
Cartago, Costa Rica 30106
(506) 4000-1103

Emergency telephone number

Emergency telephone Chemtrec US : 1-800-424-9300 Chemtrec World: 1-703-527-3887

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

Physical hazards Flam. Liq. 2 - H225

Health hazards Eye Dam. 1 - H318 STOT SE 3 - H336

Environmental hazards Not Classified

Label elements

Hazard pictograms

Signal word DANGER

Hazard statements
H225 Highly flammable liquid and vapour.
H318 Causes serious eye damage.
H336 May cause drowsiness or dizziness.

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Precautionary statements

P210 Keep away from heat/ sparks/ open flames/ 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.
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/ container in accordance with national regulations.

SECTION 3: Composition and information on ingredients

Mixtures

Ethyl acetate **50-<80%**

CAS number: 141-78-6

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

N-Propanol **30-<50%**

CAS number: 71-23-8

Classification
Flam. Liq. 2 - H225
Eye Dam. 1 - H318
STOT SE 3 - H336

Synthetic Organic Pink Colorant **5-<10%**

CAS number: Proprietary

Classification
Eye Irrit. 2A - H319

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

Composition comments

This material does not contain any Hazardous Air Pollutants (HAPS) as defined by the Clean Air Act under the US Environmental Protection Agency (EPA).

Ingredient notes

The exact percentage/concentration is withheld as a trade secret in accordance with 29 CFR 1910.1200. The exact identity is withheld as a trade secret in accordance with 29 CFR 1910.1200.

SECTION 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. Consult a physician for specific advice.

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.

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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	Gas or vapour in high concentrations may irritate the respiratory system. Vapours may cause drowsiness and dizziness.
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 vapour may include the following: Severe irritation, burning, tearing and blurred vision.

Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	None known.

Special hazards arising from the substance or mixture

Specific hazards	Flammable liquid and vapour. Vapours 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 vapours. Use water spray to reduce vapours.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
Hazchem Code	•3YE

SECTION 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 vapours. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place.

Environmental precautions

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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

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.

SECTION 7: Handling and storage, including how the chemical may be safely used

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.

Storage class Flammable liquid storage.

Specific end use(s)

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

SECTION 8: Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ethyl acetate

Long-term exposure limit (8-hour TWA): 200 ppm 720 mg/m³
Short-term exposure limit (15-minute): 400 ppm 1440 mg/m³

N-Propanol

Long-term exposure limit (8-hour TWA): 200 ppm 492 mg/m³
Short-term exposure limit (15-minute): 250 ppm 614 mg/m³
Sk

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Long-term exposure limit (8-hour TWA): WEL - Workplace Exposure Limit 15 mg/m3
Sk = Absorption through the skin may be a significant source of exposure.

Exposure controls

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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, vapour 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 vapour 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.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Coloured liquid.
Colour	Fluorescent. Red.
Odour	Ester. Sweetish.
Melting point	-127°C/-196.6°F
Initial boiling point and range	78°C/172°F @ 760 mm Hg
Flash point	-4°C/24°F Closed cup.
Evaporation rate	4.1 (butyl acetate = 1)
Flammability Limit - Lower(%)	Upper flammable/explosive limit: 11 % vol Lower flammable/explosive limit: 2.2 % vol
Vapour pressure	86 mm Hg @ 20°C/68°F
Vapour density	2.1
Relative density	0.915 g/cc 915 g/l 7.63 lbs/gal
Solubility(ies)	Soluble in the following materials: Alcohols. Esters. Slightly soluble in water.
Partition coefficient	log Pow: 0.73
Auto-ignition temperature	413°C/775°F

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Decomposition Temperature	Not applicable.
Explosive properties	Not applicable.
Oxidising 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.
Volatile organic compound	This product contains a maximum VOC content of 805 g/l. This product contains a maximum VOC content of 6.71 lbs/gal.
HAPS Content	0.00

SECTION 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.
Conditions to avoid	Avoid the following conditions: Heat, sparks, flames.
Materials to avoid	Avoid contact with the following materials: Strong acids. Strong alkalis. Strong oxidising agents.
Hazardous decomposition products	Heating may generate the following products: Carbon dioxide (CO2). Carbon monoxide (CO).

SECTION 11: Toxicological information

Information on toxicological effects

Toxicological effects Information given is based on data of the components and of similar products.

Specific target organ toxicity - single exposure

Target organs Eyes Respiratory system, lungs

Specific target organ toxicity - repeated exposure

Target organs Skin

Toxicological information on ingredients.

Ethyl acetate

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	58.0
ATE inhalation (vapours mg/l)	58.0

Serious eye damage/irritation

Serious eye damage/irritation	Causes eye irritation.

Specific target organ toxicity - single exposure

Target organs	Central nervous system

N-Propanol

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Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} dust/mist mg/l)	9.9
ATE inhalation (dusts/mists mg/l)	9.9

Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye irritation.

Specific target organ toxicity - single exposure

Target organs	Central nervous system

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Acute toxicity - oral

Notes (oral LD_{50})	LD_{50} 23000 mg/kg, , Rat

Acute toxicity - dermal

Notes (dermal LD_{50})	LD_{50} >10200 mg/kg, Dermal, Rat

Acute toxicity - inhalation

Notes (inhalation LC_{50})	LD_{50} >3 mg/l, Inhalation, Rat

SECTION 12: Ecological information

Ecological information on ingredients.

Ethyl acetate

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 48 hours: 270 mg/l, Leuciscus idus (Golden orfe) LC_{50}, 96 hours: 230 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC_{50}, 24 hours: 717 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 48 hours: 3300 mg/l, Freshwater algae
Acute toxicity - microorganisms	EC_{50}, 5 minutes: 1180 mg/l, Activated sludge EC_{50}, 15 minutes: 1500 mg/l, Activated sludge EC_{50}, 2 hours: 7400 mg/l, Activated sludge

N-Propanol

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: > 804 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	LC_{50}, 96 hours: > 804 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 48 hours: >100 mg/l, Pseudokirchneriella subcapitata

Chronic aquatic toxicity

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Chronic toxicity - aquatic invertebrates	NOEC, 21 days: >100 mg/l, Daphnia magna

Persistence and degradability

Ecological information on ingredients.

N-Propanol

Persistence and degradability	The product is readily biodegradable.
Biodegradation	Soil - Degradation 75%: 20 days
Biological oxygen demand	<2000 mg O_2/l
Chemical oxygen demand	0.071 g O_2/g substance

Bioaccumulative potential

Partition coefficient log Pow: 0.73

Ecological information on ingredients.

Ethyl acetate

Partition coefficient	Pow: 5.4 log Pow: 0.73

SECTION 13: Disposal considerations

Waste treatment methods

General information	The generation of waste should be minimised 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. When handling waste, the safety precautions applying to handling of the product should be considered.

SECTION 14: Transport information

UN number

UN No. (ADG)	1210
UN No. (IMDG)	1210
UN No. (ICAO)	1210

UN proper shipping name

Proper shipping name (ADG)	PRINTING INK
Proper shipping name (IMDG)	PRINTING INK
Proper shipping name (ICAO)	PRINTING INK

Transport hazard class(es)

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ADG class	3
ADG classification code	F1
ADG label	3
IMDG class	3
ICAO class/division	3

Transport labels

Packing group

ADG packing group	II
IMDG packing group	II
ICAO packing group	II

Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

Special precautions for user

EmS	F-E, S-D
Hazchem Code	•3YE

SECTION 15: Regulatory information

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
The following ingredients are listed:

Ethyl acetate

N-Propanol

Japan - ENCS
The following ingredients are listed:

Ethyl acetate

N-Propanol

Korea - KECI
The following ingredients are listed:

Ethyl acetate

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N-Propanol

China - IECSC
The following ingredients are listed:

Ethyl acetate

N-Propanol

Philippines - PICCS
The following ingredients are listed:

Ethyl acetate

N-Propanol

New Zealand - NZIOC
The following ingredients are listed:

Ethyl acetate

N-Propanol

Taiwan - TCSI
The following ingredients are listed:

Ethyl acetate

N-Propanol

SECTION 16: Any other relevant information

Issued by	Matthews Marking Systems - Chemical Services Department
Revision date	2/03/2020
Revision	5
Supersedes date	11/04/2019
SDS No.	4795
SDS status	Approved.
Hazard statements in full	H225 Highly flammable liquid and vapour. H318 Causes serious eye damage. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.