1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Identity	18696 Marking Fluid Red, Blue
Alternate Names	18696 Marking Ink, Red, Blue

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

Intended use	See Technical Data Sheet.
Application Method	See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name	Sprinter Marking, Inc 1805 Chandlersville Road Zanesville, Ohio 43701 USA
Emergency	
24 hour Emergency Telephone No.	ChemTel 1-800-255-3924 (MIS0006470) International +01-813-248-0585
Customer Service: Sprinter Marking, Inc	Phone +1.740.453.1000 Fax +1.740.453.6750 Email: sales@sprintermarking.com

2. Hazard identification of the product

2.1. Classification of the substance or mixture

Flam. Liq. 2;H225	Highly Flammable liquid and vapor.
Eye Irrit. 2;H319	Causes serious eye irritation.
STOT SE 3;H336	May cause drowsiness or dizziness.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

Danger

H225 Highly flammable liquid and vapor.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

[Prevention]:

P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.

P241 Use explosion-proof electrical / ventilating / light / equipment.

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P337+313 If eye irritation persists: Get medical advice / attention.

P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

[Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Ethyl acetate **CAS Number: 0000141-78-6**	**1.0 - 10**	**Flam. Liq. 2;H225** **Eye Irrit. 2;H319** **STOT SE 3;H336**	**[1][2]**
1-Methoxy-2-propanol **CAS Number: 0000107-98-2**	**25 - 50**	**Flam. Liq. 3;H226** **STOT SE 3;H336**	**[1][2]**
Isopropyl Alcohol **CAS Number: 0000067-63-0**	**25 - 50**	**Flam. Liq. 2;H225** **Eye Irrit. 2;H319** **STOT SE 3;H336**	**[1][2]**
Titanium dioxide **CAS Number: 0013463-67-7**	**10 - 25**		**[1][2]**
Rosin, Fumeric **CAS Number: 800680-57-9**	**1.0 - 10**		**[1]**
Ethanol **CAS Number: 0000064-17-5**	**1.0 - 10**	**Flam. Liq. 2;H225**	**[1][2]**
Acetic acid, 1-methylethyl ester **CAS Number: 0000108-21-4**	**1.0 - 10**	**Flam. Liq. 2;H225** **Eye Irrit. 2;H319** **STOT SE 3;H336**	**[1][2]**
Cellulose Nitrate **CAS Number: 0009004-70-0**	**1.0 - 10**	**Expl. 1.1;H201**	**[1]**

[1] Substance classified with a health or environmental hazard.
[2] Substance with a workplace exposure limit.
[3] PBT-substance or vPvB-substance.
*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation Move the exposed person to fresh air at once. If not breathing, give artificial respiration. Give oxygen. Get medical attention if any discomfort continues

Eyes Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Skin Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

Ingestion DO NOT INDUCE VOMITING! If swallowed, vomiting may occur spontaneously. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Rinse mouth thoroughly. Get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Overview Ingestion: May cause stomach pain or vomiting. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details.

Inhalation May cause drowsiness or dizziness.

Eyes Causes serious eye irritation.

5. Fire-fighting measures

5.1. Extinguishing media

Use foam, extinguishing powder, dry chemicals, or carbon dioxide. Water may be ineffective. Water may be used to keep fire exposed containers cool.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

Keep away from heat / sparks / open flames / hot surfaces - No smoking.

Use explosion-proof electrical / ventilating / light / equipment.

5.3. Advice for fire-fighters

In the event of fire, wear full protective clothing and NIOSH Approved Self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Move container from fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapors.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove sources of ignition, do not turn lights or unprotected electrical equipment on or off. In case of a major spill or spillage in a confined space evacuate the area and check that solvent vapor levels are below the Lower Explosive Limit before re-entering.

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Avoid sparks, flames, heat and smoking. Ventilate. Wear necessary protective equipment. Absorb in vermiculite, dry sand or earth and place into containers.

Small Spill: Use a non-combustible material like vermiculite, sand or earth to soak up product and place in a container for later disposal.

7. Handling and storage

7.1. Precautions for safe handling

Keep in containers lightly closed in a cool, well ventilated place. Do not store with oxidizing agents or acids. Keep in the original container. Avoid direct sunlight

Store in accordance with the National Fire Protection Association's publication NFPA 30, Flammable and Combustible Liquids Code. 29 CFR 1910.106 applies to the handling, storage, and use of flammable and combustible liquids.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Store in a cool dry area, away from heat, sparks and open flame. Keep containers sealed when not in use. Store out of direct sunlight.

Store in a cool dry place.

Incompatible materials: Store away from oxidizers and acids.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000064-17-5	Ethanol	OSHA	TWA 1000 ppm (1900 mg/m3)
		ACGIH	STEL: 1000 ppm Revised 2009,
		NIOSH	TWA 1000 ppm (1900 mg/m3)
		Supplier	No Established Limit
0000067-63-0	Isopropyl Alcohol	OSHA	TWA 400 ppm (980 mg/m3)STEL 500 ppm
		ACGIH	TWA: 200 ppmSTEL: 400 ppm Revised 2003,
		NIOSH	TWA 400 ppm (980 mg/m3) ST 500 ppm (1225 mg/m3)
		Supplier	No Established Limit
0000107-98-2	1-Methoxy-2-propanol	OSHA	No Established Limit
		ACGIH	TWA: 50 ppmSTEL: 75 ppm
		NIOSH	TWA 100 ppm (360 mg/m3) ST 150 ppm (540 mg/m3)
		Supplier	No Established Limit
0000108-21-4	Acetic acid, 1-methylethyl ester	OSHA	TWA 250 ppm (950 mg/m3)
		ACGIH	TWA: 100 ppmSTEL: 200 ppm Revised 2003,
		NIOSH	no established RELs
		Supplier	No Established Limit
0000141-78-6	Ethyl acetate	OSHA	TWA 400 ppm (1400 mg/m3)
		ACGIH	TWA: 150 ppm
		NIOSH	TWA 400 ppm (1400 mg/m3)
		Supplier	No Established Limit
0009004-70-0	Cellulose Nitrate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0013463-67-7	Titanium dioxide	OSHA	TWA 15 mg/m3
		ACGIH	TWA: 10 mg/m32B, Revised 2006,
		NIOSH	Ca
		Supplier	No Established Limit
800680-57-9	Rosin, Fumeric	OSHA	No Established Limit
		ACGIH	No Established Limit

		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000064-17-5	Ethanol	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: Yes; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000067-63-0	Isopropyl Alcohol	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
0000107-98-2	1-Methoxy-2-propanol	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000108-21-4	Acetic acid, 1-methylethyl ester	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000141-78-6	Ethyl acetate	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0009004-70-0	Cellulose Nitrate	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0013463-67-7	Titanium dioxide	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No;
800680-57-9	Rosin, Fumeric	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

8.2. Exposure controls

Respiratory Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator. The following should be effective types of air purifying respirators: Organic vapor cartridge.

Eyes Wear safety eyewear, e.g. safety spectacles, goggles or visors to protect against the splash of liquids.

Skin Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. All parts of the body should be washed after contact. Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials

include: Butyl rubber. Polyethylene/ethyl vinyl alcohol laminate ("PE/EVAL"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). Viton

Engineering Controls Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices Do not smoke, or drink in work area. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin.
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance	Colored Liquid
Odor	Sweet alcohol
Odor threshold	Not Measured
pH	Not Measured
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	82 C 160F
Flash Point	10-15C 50-60F Method (Setaflash)
Evaporation rate (Ether = 1)	1.0
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	**Lower Explosive Limit:** 3.0
	Upper Explosive Limit: 19.0
Vapor pressure (Pa)	4.16 kPa Temperature (C) 20
Vapor Density	>2
Specific Gravity	0.810 g/mL Temperature
Solubility in Water	65-75%
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
VOC %	65-75% Approximately 5.9 Lbs/gal
% Volatile	65-75%

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

High temperatures, fires, and incompatibles.

10.5. Incompatible materials

Store away from oxidizers and acids.

10.6. Hazardous decomposition products

No hazardous decomposition data available.

11. Toxicological information

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Ethyl acetate - (141-78-6)	5,600.00, Rat - Category: NA	18,000.00, Rabbit - Category: NA	58.60, Rat - Category: NA	No data available	No data available
1-Methoxy-2-propanol - (107-98-2)	5,000.00, Rat - Category: 5	13,000.00, Rabbit - Category: NA	No data available	No data available	No data available
Isopropyl Alcohol - (67-63-0)	4,710.00, Rat - Category: 5	12,800.00, Rat - Category: NA	72.60, Rat - Category: NA	No data available	No data available
Titanium dioxide - (13463-67-7)	10,000.00, Rat - Category: NA	10,000.00, Rabbit - Category: NA	No data available	6.82, Rat - Category: NA	No data available
Rosin, Fumeric - (800680-57-9)	No data available	No data available	No data available	No data available	No data available
Ethanol - (64-17-5)	7,060.00, Rat - Category: NA	20,000.00, Rabbit - Category: NA	124.70, Rat - Category: NA	No data available	No data available
Acetic acid, 1-methylethyl ester - (108-21-4)	6,750.00, Rat - Category: NA	20,000.00, Rabbit - Category: NA	17,129.60, Rabbit - Category: NA	No data available	No data available

Cellulose Nitrate - (9004-70-0)	5,000.00, Mouse - Category: 5	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	2	Causes serious eye irritation.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	3	May cause drowsiness or dizziness.
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Ethyl acetate - (141-78-6)	100.00, Danio rerio	100.00, Daphnia magna	100.00 (72 hr), Desmodesmus subspicatus
1-Methoxy-2-propanol - (107-98-2)	1,000.00, Oncorhynchus mykiss	500.00, Daphnia magna	1,000.00 (96 hr), Selenastrum capricornutum
Isopropyl Alcohol - (67-63-0)	1,400.00, Lepomis macrochirus	100.00, Daphnia magna	100.00 (72 hr), Scenedesmus subspicatus
Titanium dioxide - (13463-67-7)	1,000.00, Fundulus heteroclitus	5.50, Daphnia magna	5.83 (72 hr), Pseudokirchneriella subcapitata
Rosin, Fumeric - (800680-57-9)	Not Available	Not Available	Not Available
Ethanol - (64-17-5)	42.00, Oncorhynchus	2.00, Daphnia magna	17.921 (96 hr), Ulva pertusa

	mykiss		
Acetic acid, 1-methylethyl ester - (108-21-4)	Not Available	Not Available	Not Available
Cellulose Nitrate - (9004-70-0)	Not Available	Not Available	579.00 (96 hr), Pseudokirchneriella subcapitata

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Do not allow into drains or water courses. Wastes and emptied containers should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act.

Using information provided in this data sheet advice should be obtained from the Waste Regulation Authority, whether the special waste regulations apply.

14. Transport information

	DOT (Domestic Surface Transportation)	**IMO / IMDG (Ocean Transportation)**	**ICAO/IATA**
14.1. UN number	UN1210	UN1210	UN1210
14.2. UN proper shipping name	Printing ink	Printing ink	Printing ink
14.3. Transport hazard class(es)	**DOT Hazard Class:** 3 **DOT Label:** 3	**IMDG:** 3 **Sub Class:** Not Applicable **EmS:** F-E, S-D	**Air Class:** 3 Packing Instruction: Cargo Only - 364, Passenger -353
14.4. Packing group	II	II	II

14.5. Environmental hazards

IMDG Marine Pollutant: Yes

14.6. Special precautions for user

No further information

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not Applicable

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented. All components of this material are either listed or exempt from listing on the TSCA Inventory.

NFPA Rankings:

WHMIS Classification B2 D2B

US EPA Tier II Hazards

Fire: Yes
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): Yes
Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs (lbs):

Ethyl acetate (5,000.00)

N-Butyl Acetate (5,000.00)

EPCRA 302 Extremely Hazardous :
(No Product Ingredients Listed)

EPCRA 313 Toxic Chemicals:

Isopropyl Alcohol

Proposition 65 - Carcinogens (>0.0%):
(No Product Ingredients Listed)

Proposition 65 - Developmental Toxins (>0.0%):
(No Product Ingredients Listed)

Proposition 65 - Female Repro Toxins (>0.0%):
(No Product Ingredients Listed)

Proposition 65 - Male Repro Toxins (>0.0%):
(No Product Ingredients Listed)

N.J. RTK Substances (>1%):

1-Methoxy-2-propanol
Acetic acid, 1-methylethyl ester
Cellulose Nitrate
Ethanol
Ethyl acetate
Isopropyl Alcohol
Titanium dioxide

Penn RTK Substances (>1%):

1-Methoxy-2-propanol
Acetic acid, 1-methylethyl ester
Cellulose Nitrate
Ethanol
Ethyl acetate
Isopropyl Alcohol
Titanium dioxide

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H201 Explosive; mass explosion hazard.

H225 Highly flammable liquid and vapor.

H226 Flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness and dizziness.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

This product is RoHS and REACH compliant. It does not contain any of the RoHS listed substances. It does not contain any chemical from the candidate list of Substances of Very High Concern (SVHC), Annex XIV, or Annex XVII of Reach.

This information is based on our present knowledge. However, it does not constitute a guarantee for any specific product properties.

Sprinter Marking urges the recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. The use of this product is beyond the control Sprinter Marking or it's distributor, therefore, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product.

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