



Safety Data Sheet



According to OSHA 29 CFR 1910.1200 HCS & Canada WHMIS

Revision Date : 15.07.2014

SECTION 1: Identification

1.1. Product identifier

Product Name : Jiffy Eco-Marker 30,70,90,100
 JK-30,JK-70,JK-90,JK-100
 Color : (Green)
 Refill Ink
 JK-20,ESK-60,ESK-3



1.2. Recommended use of the chemical and restrictions on use

Recommended use : Permanent marker ink

1.3. Details of the supplier of the safety data sheet

Supplier Company Name : Jiffco International Ltd.
 Address : 835 - West 3rd Street North Vancouver , BC V7P 3K7 Canada
 Telephone : 604-980-2685
 Fax : 604-980-8549
 Contact (e-mail) : sales@jiffco.net



Manufacturer Company Name : Shachihata Inc.
 Address : 4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
 Telephone : +81-52-521-3600
 Fax : +81-52-521-3899
 Contact (e-mail) : chem-analysis@ngy.shachihata.co.jp



1.4. Emergency telephone number

Telephone : 800-541-9719 ext. 6466

SECTION 2: Hazard(s) identification

United States (US) : According to OSHA 29 CFR 1910.1200 HCS 2012

2.1.1 Classification of the substance or mixture

Flammable liquids, Category 2 H225 : Highly flammable liquid and vapour
 Serious eye damage /eye irritation, Category 1 H318 : Causes serious eye damage

2.1.2 Label elements

Hazard pictograms :



Signal word : Danger
 Hazard statement : Highly flammable liquid and vapour (H225)
 Causes serious eye damage (H318)

Precautionary statement

【Prevention】
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. (P210)
 Take precautionary measures against static discharge. (P243)
 Wear protective gloves/protective clothing/eye protection/face protection. (P280)
 Use only outdoors or in a well-ventilated area. (P271)
 Wash hands thoroughly after handling. (P264)

【Response】
 In case of fire : Use dry chemical powder,form or carbon dioxide for extinction. (P370+P378)
 IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing. (P304+P340)
 IF IN EYES : Rinse cautiously with water for several minutes. (P305+P351+P338)
 Remove contact lenses, if present and easy to do. Continue rinsing.

- If eye irritation persists : Get medical advice/attention. (P337+P313)
 IF ON SKIN (or hair) : Remove/Take off immediately all contaminated clothing. (P303+P361+P353)
 Rinse skin with water/shower.
 If skin irritation occurs : Get medical advice/attention. (P332+P313)
 IF SWALLOWED : Get medical advice/attention if you feel unwell.Rinse mouth. (P301+P314+P330)
【Storage】
 Store in a well-ventilated place. Keep container tightly closed. (P403+P233)
【Disposal】
 Dispose of contents/container to waste in accordance with (P501)
 local/regional/ national/international regulation (to be specified).

2.1.3 Other hazards

Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada : According to WHMIS

2.2.1 Classification of the substance or mixture

- Class B2 : Flammable Liquids
 Class D2B : Eye irritation

2.2.2 Label elements



2.2.3 Other hazards

In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS)

2.3 Other information

NFPA **HMIS**

SECTION 3: Composition/information on ingredients

Substance/Mixture : Mixture
 Ingredients :

Chemical Name / Generic name	Composition weight %	CAS Registry No.	Classification (OSHA HCS 2012)	
			Hazard Class	Hazard statement
Ethanol	45 ~ 55	64-17-5	Flam.Liq. 2	H225
Propan-1-ol	5 ~ 15	71-23-8	Flam.Liq. 2 Eye Irrit. 1 STOT.SE. 3	H225 H318 H336
Ethyl lactate	10 ~ 20	97-64-3	Flam.Liq. 3 Eye Irrit. 1 STOT.SE. 3	H226 H318 H335
Benzyl alcohol	1 ~ 5	100-51-6	Acute Tox.(oral) 4 Acute Tox.(inhal.) 4	H302 H332
Synthetic resin	10 ~ 20	Confidential	none	none
Dyestuff	5 ~ 10	Confidential	none	none
total	100			

SECTION 4: First-aid measures

4.1. Description of first aid measures

- IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Consult a doctor if symptoms persist.
- IF ON SKIN : Remove/Take off immediately all contaminated clothing.Wash with soap and water. If skin irritation/rash occurs or feel unwell, consult a doctor for medical advice.
- IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.Continue rinsing.If eye irritation persists, get medical advice/attention.
- IF SWALLOWED : After rinse mouth immediately, give about 250 ml of water or milk and thin in the stomach, and do not vomit forcibly.Moreover, do not give anything from the mouth to the patient when not conscious.Receive the doctor's treatment (stomach pump) promptly.

Note to Physicians :

- All treatments should be based on observed signs and symptoms of distress in the patient.
Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Dry chemical powder, foam or carbon dioxide
Unsuitable extinguishing media : Water jet

5.2. Special hazards arising from the substance or mixture

- For initial stage extinction, carbon dioxide or dry chemical powder.
When a fire extends, fire is extinguished by a large amount of water spray.
Do not discharge extinguishing waters into the aquatic environment.

5.3. Advice for firefighters

- In the extinction work, an appropriate protective equipment (gloves, glasses, and mask) has to be worn.
Because during a fire, hazardous gases may be generated, fire-fighters have to wear self-contained breathing apparatus and other protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- Evacuate personnel to safe area. Shut off all sources of ignition.
No Flares, smoking or flame in area. Put on protective equipment. Ensure adequate ventilation.

6.2. Environmental precautions

- Do not throw the leakage thing directly into environment

6.3. Methods and material for containment and cleaning up

- In case of a small spill, remove by absorbing with absorbents (sawdust, soil, sand, waste cloth,etc.), and then wipe off the waste well with waste cloth, and rag.
In case of large spills, prevent leakage by enclosing with nonflammables (earth and sand, etc.) and collect into empty container by scoop, suction equipment or the like.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Advice on safe handling : Use with adequate ventilation.
Avoid contact with skin, eyes and clothing.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

- Requirements for storage : Keep containers tightly closed and store in a cool and dry place.
areas and containers : Keep away from heat and flame,ignition source and sunlight.
Keep out of the reach of children.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ACGIH (2013)

Ethanol	STEL	1000ppm
Propan-1-ol	TWA	100ppm

OSHA PEL

Ethanol	TWA	1000ppm
Propan-1-ol	TWA	200ppm

Canada Ontario Provincial

Ethanol	STEL	1000ppm
Propan-1-ol	TWA	100ppm

Canada Quebec Provincial

Ethanol	TWA	1000ppm
Propan-1-ol	TWA	200ppm

8.2. Exposure controls

Personal protective equipment

Respiratory Protection : Use with local exhaust ventilation, when in long use.
Avoid breathing vapours. Wear mask to prevent organic gas, if necessary.

Hand Protection : Avoid contact with hands. Wear safety gloves, if necessary.

Eye Protection : Avoid contact with eyes. Wear safety glasses, if necessary.

Skin Protection : Avoid skin contact. Wear personal protection apron, boots, if necessary.

Environmental exposure controls

General advice : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: green liquid
Odor	: minor solvent odor
pH	: Not applicable
Boiling point	: No data available
Flash point	: 61.7 °F (16.5 °C) (closed cup)
Relative Density (at 77 °F, 25 °C)	: 0.85 ~ 0.95 (g/cm ³)
Solubility in Water	: Insoluble

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.3. Chemical stability

The product is stable.

10.4. Conditions to Avoid

High temperature, Direct sunlight, Fire

10.5. Incompatible Materials

No data available

10.6. Hazardous decomposition products

CO, CO₂

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: LD/LC50 values that are relevant for classification
	[Ethanol]
	Oral-rat LD50 7,060mg/kg
	Inhalation-rat LC50 20,000ppm/10h
	[Propan-1-ol]
	Oral-rat LD50 1,870mg/kg
	Dermal-rabbit LD50 4,060mg/kg
	Inhalation-rat LC50 4,000mg/l/4H
	[Ethyl lactate]
	Oral-rat LD50 2,500mg/kg
	Inhalation-rat LC50 >5,400mg/m ³ /8H

[Benzyl alcohol]

Oral-rat	LD50	1,610mg/kg
Dermal-rabbit	LD50	2,000mg/kg
Inhalation-rat	LC50	>4,178mg/l/4H

- Serious eye damage /eye irritation : Category 1 Causes serious eye damage
- Carcinogenicity : This product does not contain any component that is considered a human carcinogen by IARC, ACGIH, OSHA or NTP .

SECTION 12: Ecological information

- 12.1. Ecotoxicity : No data available
- 12.2. Persistence and degradability : No data available
- 12.3. Bioaccumulative potential : No data available
- 12.4. Mobility in soil : No data available
- 12.5. Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
- Disposal must be made according to official regulations.
- Comply with all Federal, State, and Local regulations regarding disposal.
- Do not allow product to reach ground, any water course or sewage system.

SECTION 14: Transport information

- 14.1. UN number DOT, TDG, IMO / IMDG, IATA / ICAO : UN1210
- 14.2. UN proper shipping name DOT, TDG, IMO / IMDG, IATA / ICAO : PRINTING INK,flammable
- 14.3. Transport hazard class(es) DOT, TDG, IMO / IMDG, IATA / ICAO :
 · Class 3 (Flammable liquids.)
 · Label 3
- 14.4. Packing group DOT, TDG, IMO / IMDG, IATA / ICAO : II
- 14.5. Environmental hazards Marine pollutant : No
- 14.6. Special precautions for user EMS Number : F-E,S-D
- 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable.



☆☆
 Jiffy Eco-Marker (JK-30,JK-70,JK-90) is not a hazardous material by the special provision.
 However, Jiffy Eco-Marker (JK-100) is a hazardous material (UN3175) for more than 10ml.

Jiffy Eco-Marker (JK-30,JK-70,JK-90)		(Amount of ink : less than 10ml)
UN number	: UN3175	
UN proper shipping name	: Solids containing Flammable Liquid. n.o.s.	
IATA	: Special Provision A46	
IMDG Code	: Special Provision 216	
According to IATA Special Provision A46, and IMDG Code Special Provision 216, small inner packagings consisting of sealed packets and articles containing less than 10 mL of a Class 3 liquid in Packing Group II or III absorbed onto a solid material are not subject to as a hazardous material/dangerous goods provided there is no free liquid in the packet or article.		
Jiffy Eco-Marker (JK-100)		(Amount of ink : over 10ml)
UN number	: UN3175	
UN proper shipping name	: Solids containing Flammable Liquid. n.o.s.	
UN Classification	: 4.1	
Packing group	: II	

SECTION 15: Regulatory information

- < USA Information >
- OSHA STATUS : This product is hazardous under 29 CFR 1910.1200.
- TSCA inventory : All components of this product are listed in the TSCA Inventory.
- TSCA Hazard Communication Program (40 CFR Part 721) (SNUR) : not Listed
- EPCRA Section 302 Extremely Hazardous Substances (EHS) : not Listed
- EPCRA Section 313 Toxic Chemicals : not Listed

CERCLA Hazardous Substances : not Listed
CAA Section 112(r) List of Substances for Accidental Release Prevention : not Listed
California Proposition 65 : not Listed

< Canada Information >

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

Canada inventory : All components of this product are listed in the DSL/NDSL Inventory.

WHMIS Ingredient Disclosure List (SOR/88-64) : Ethanol, Propan-1-ol, Benzyl alcohol

(WHMIS : Canadian Workplace Hazardous Material Information System)

SECTION 16: Other information, including date of preparation or last revision

Last Revision Date : 15.07.2014
Preparation Date : 02.04.2007



EU RoHS Directive(2002/95/EC) and ELV Directive(2000/53/EC)
This product not contain lead, mercury, cadmium, hexavalent chromium,
polybrominated biphenyls (PBB) or polybrominated diphenylethers (PBDE).

This data sheet may not be enough when evaluating danger or hazard. The above information, which is created from currently available documents, information and data, may be revised when new findings announced. This document has been written on the assumption that when dealing with a large amount of ink on the business case and emergency. When handling as a normal product, please refer to the notes that is described in the produce or packaging. The information contained herein is not intended to provide any kind of warranty other than information, there is no guarantee for the accuracy of the content.