SAFETY DATA SHEET INKEUPS

CANDYMARK Ixcx-y

YELLOW

Inkcups requests that the users of this product study this Material Safety Data Sheet (MSDS) and become aware of product hazards and safety information. To promote safe use of this product, a user should notify its employees, contractors and agents of the information in this MSDS and any product hazards and safety information.

Section 1. Identification

Product name CANDYMARK EDIBLE INK
Product code CANDYMARK YELLOW

Product type Liquid.

Relevant identified uses of the substance or mixture and uses advised against
Manufacture of pharmaceutical products and/or Manufacture of food products

Supplier's details

310 Andover St. Danvers, MA. 01923 USA

www.inkcups.com

E-mail: Compliance@inkcups.com

Phone: 978.646.8980

Emergency telephone

number US - 800-424-9300 International - +001-703-527-3887

Section 2. Hazards identification

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 4

GHS label elements

Signal word Warning

Hazard statements Combustible liquid.

Precautionary statements

General Read label before use. Keep out of reach of children. If medical advice is needed, have

product container or label at hand.

Prevention Wear protective gloves, protective clothing and eye or face protection. Keep away from

flames and hot surfaces. No smoking.

Response Not applicable.

Storage Store in a well-ventilated place. Keep cool.

Disposal Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Hazards not otherwise

classified

None known.

See Section 11 for more detailed information on health effects and symptoms.

Section 3. Composition/information on ingredients

Substance/mixture Mixture

Product code | lxcx-y

Ingredient name % CAS number ETHANOL 1 - 5 64-17-5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

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Section 4. First aid measures

Description of necessary first aid measures

Eye contact Affected individual should remove contact lens, if present. Immediately flush eyes with

plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

Get medical attention if irritation occurs.

Inhalation Move exposed person to fresh air. If not breathing, if breathing is irregular or if

respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Get medical attention if symptoms occur.

Skin contact In case of contact, immediately flush skin with plenty of water while removing

contaminated clothing and shoes. Get medical attention if irritation develops.

Ingestion Wash out mouth with water. Do not induce vomiting unless directed to do so by medical

personnel. Get medical attention if symptoms occur. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar,

tie, belt or waistband.

Potential acute health effects

Eye contactNo known significant effects or critical hazards.InhalationNo known significant effects or critical hazards.Skin contactNo known significant effects or critical hazards.IngestionNo known significant effects or critical hazards.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Flammability of the product : Non-flammable.

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

Do not use water jet.

Specific hazards arising from the chemical

Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subacquent explosion.

subsequent explosion.

Hazardous thermal decomposition products

Decomposition products may include the following materials:

Use dry chemical, CO2, water spray (fog) or foam.

carbon dioxide carbon monoxide nitrogen oxides sulfur oxides metal oxide/oxides

Special protective actions

for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Keep unnecessary personnel away. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Use suitable protective equipment (section 8).

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel"

Section 6. Accidental release measures

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Small spill : Absorb with an inert material and place in an appropriate waste disposal

container.

Large spill

: Large spill : Use appropriate containment to avoid environmental contamination. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Contaminated absorbent material may pose the same hazard as the spilled product. Use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Do not ingest. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container closed. Use only with adequate ventilation. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

including any

incompatibilities

Conditions for safe storage, : Keep container tightly closed. Store in a dry, cool and well-ventilated area. Store away from incompatible materials (see Section 10). Store in accordance with local

regulations.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
ETHANOL	ACGIH TLV (United States, 1/2023). STEL: 1000 ppm 15 minutes. NIOSH REL (United States, 10/2020). TWA: 1900 mg/m³ 10 hours. TWA: 1000 ppm 10 hours. OSHA PEL (United States, 5/2018). TWA: 1900 mg/m³ 8 hours. TWA: 1000 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 1900 mg/m³ 8 hours. TWA: 1900 mg/m³ 8 hours.

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

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Section 8. Exposure controls/personal protection

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before

eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety

showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk

assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-

shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be

worn at all times when handling chemical products if a risk assessment indicates this is

necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being

performed and the risks involved and should be approved by a specialist before

handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected

based on the task being performed and the risks involved and should be approved by a

specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved

standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe

working limits of the selected respirator.

Section 9. Physical and chemical properties

Values provided should not be construed as specifications. See product specification for additional information.

Physical state : Liquid.

Appearance : Yellow Liquid

Flash point : Closed cup: 90°C (194°F)

Boiling point : Lowest known value: 78.29°C (172.9°F) (ethanol). Weighted average: 210.86°C

(411.5°F)

Odor : Not available.
Odor threshold : Not available.

Melting point/freezing

point

Ha

: May start to solidify at the following temperature: 18.17°C (64.7°F) This is based on

data for the following ingredient: glycerol. Weighted average: 4.72°C (40.5°F)

Evaporation rate : 1.7 (ethanol) compared with butyl acetate

: Not available.

Flammability (solid, gas) : Not applicable.

Upper/lower : Great

: Greatest known range: Lower: 2.7% Upper: 19% (glycerol)

flammability or explosive limits

Vapor pressure : Highest known value: 5.7 kPa (42.9 mm Hg) (at 20°C) (ethanol). Weighted average:

1.12 kPa (8.4 mm Hg) (at 20°C)

Vapor density : Highest known value: 3.2 (Air = 1) (glycerol). Weighted average: 3.07 (Air = 1)

Relative density : Weighted average: 1.2 (Water = 1)

Solubility(ies) : Not available.

Partition coefficient: n- : Not available.

octanol/water

Auto-ignition: Lowest known value: 370°C (698°F) (glycerol).

Decomposition : Not available.

temperature

temperature

Viscosity : Dynamic: Highest known value: 1412 cP (glycerol) Weighted average: 1296.41 cP

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Explosive properties

Explosive in the presence of the following materials or conditions: open flames,

sparks and static discharge and heat.

Oxidizing properties

: Not available.

Section 10. Stability and reactivity

Reactivity

: Explosive in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Chemical stability

: The product is stable.

Possibility of hazardous

reactions

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

Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials

: Reactive or incompatible with the following materials:

oxidizing materials

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ETHANOL	LC50 Inhalation Vapor	Rat	124700 mg/m ³	4 hours
	LD50 Oral	Rat	7 g/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
ETHANOL	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
	Eyes - Moderate irritant	Rabbit	-	0.066666667	-
				minutes 100	
				mg	
	Eyes - Moderate irritant	Rabbit	-	100 uL	-
	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	400 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
				mg	

Classification

Product/ingredient name	OSHA	IARC	NTP
ETHANOL	-	1	-

Information on the likely routes of exposure

: Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Section 11. Toxicological information

Skin contact : No specific data.

Ingestion : No specific data.

Potential chronic health effects

Conclusion/Summary: Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
ETHANOL	IC50 100 mg/l	Algae	72 hours
	Acute EC50 17.921 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 2 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 25500 μg/l Marine water	Crustaceans - Artemia franciscana - Larvae	48 hours
	Acute LC50 42000 µg/l Fresh water	Fish - Oncorhynchus mykiss	4 days
	Chronic NOEC 4.995 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 100 ul/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 0.375 ul/L Fresh water	Fish - Gambusia holbrooki - Larvae	12 weeks

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
ETHANOL	-0.35	-	low

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

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Section 14. Transport information

	207	TD0		400/010	IIIDO	1070
	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	UN1210	UN1210	UN1210	UN1210	UN1210	UN1210
UN proper shipping name	Not available.	Not available.	Not available.	Not available.	Not available.	Not available.
Transport hazard class(es)	Combustible liquid.	Not available.	Not available.	Not available.	Not available.	Not available.
Packing group	III	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials.	-	-	-	-	-

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) PAIR: acetaldehyde

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

All components are active or exempted.

Clean Water Act (CWA) 311: acetaldehyde

State regulations

Massachusetts : The following components are listed: GLYCERINE MIST; ETHYL ALCOHOL

New York : None of the components are listed.

New Jersey : The following components are listed: GLYCERIN; ETHYL ALCOHOL

Pennsylvania : The following components are listed: 1,2,3-PROPANETRIOL; ETHANOL

California Prop. 65

WARNING: This product can expose you to acetaldehyde, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	Cancer	Reproductive		Maximum acceptable dosage level
ACETALDEHYDE	Yes.	No.	Yes.	-

Canada

Hazardous ingredients(Canada)	%	CAS number
ETHANOL	1 - 5	64-17-5

Canadian lists

: Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.

Canadian ARET: None of the components are listed.

Canadian NPRI: The following components are listed: ethanol **CEPA Toxic substances**: None of the components are listed.

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Section 15. Regulatory information

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. See Section 11 for more detailed information on health effects and symptoms.

WHMIS (Canada)

Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C

(200°F).

Class D-2B: Material causing other toxic effects (Toxic).

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



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<u>History</u>

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