

SAFETY DATA SHEET

INKCUPS

Candymark Edible Ink

BLACK

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 Black

Use of the substance/mixture

Manufacture of pharmaceutical products and/or Manufacture of food products

Company : Inkcups Now Corp.
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Section 2. Hazards identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 4

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 3.6%

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. Wear 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

Ingredient name	%	CAS number
FD&C RED #3/ERYTHROSINE	1 - 5	16423-68-0

Any concentration shown as a range is to protect confidentiality.

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.

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.

Section 4. First aid measures

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 contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Flammability of the product : Non-flammable.

Products of combustion : No specific data.

Fire-fighting media and instructions : Use an extinguishing agent suitable for the surrounding fire.

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 : 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).

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 for cleaning up : Small spill : Absorb with an inert material and place in an appropriate waste disposal container.
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

Handling : 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.

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

None.

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

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** : Black Liquid
- Flash point** : Closed cup: 90°C (194°F)
- Boiling point** : Lowest known value: 100°C (212°F) (water). Weighted average: 218.22°C (424.8°F)
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : 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: 11.31°C (52.4°F)
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not applicable.
- Upper/lower flammability or explosive limits** : Greatest known range: Lower: 2.7% Upper: 19% (glycerol)
- Vapor pressure** : Highest known value: 3.2 kPa (23.8 mm Hg) (at 20°C) (water). Weighted average: 1.21 kPa (9.08 mm Hg) (at 20°C)
- Vapor density** : Highest known value: 3.2 (Air = 1) (glycerol).
- Relative density** : Only known value: 1.26 (Water = 1) (glycerol).
- Solubility(ies)** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Lowest known value: 370°C (698°F) (glycerol).
- Decomposition temperature** : Not available.
- Viscosity** : Dynamic: Highest known value: 1412 cP (glycerol)
- Explosive properties** : Not available.
- Oxidizing properties** : Not available.

Section 10. Stability and reactivity

- Reactivity** : Not available.
- 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

Ingredient name	CAS #	Result	Species	Dose	Exposure
D&C RED #3/ERYTHROSINE	16423-68-0	LD50 Oral	Rat	1840 mg/kg	-

Chronic effects

No known significant effects or critical hazards.

Additional information :

Not available.

Other toxic effects on humans

No known significant effects or critical hazards. Avoid prolonged contact with eyes, skin and clothing.

Specific effects on humans

Mutagenicity / Teratogenicity / Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	136296.3 mg/kg

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

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

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Section 12. Ecological information

Toxicity

Not available.

Bioaccumulative potential

Not available.




Section 12. Ecological information

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

	DOT Classification	ADN	IMDG	IATA
UN number	1210	1210	1210	1210
UN proper shipping name	Not available.	Not available.	Not available.	Not available.
Transport hazard class(es)	Combustible liquid.	9 	Not available.	Not available.
Packing group	III		-	-
Environmental hazards	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

United States

U.S. Federal regulations : **TSCA 4(a) final test rules**: acetaldehyde
TSCA 8(a) PAIR: acetaldehyde
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): All components are listed or exempted.
 SARA 302/304: No products were found.
 SARA 311/312 Hazards identification: Fire hazard, Delayed (chronic) health hazard
 Clean Water Act (CWA) 311: acetaldehyde

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

State regulations

Connecticut Carcinogen Reporting: None of the components are listed.
 Connecticut Hazardous Material Survey: None of the components are listed.
Florida substances: None of the components are listed.
Illinois Chemical Safety Act: None of the components are listed.
Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.
Louisiana Reporting: None of the components are listed.
Louisiana Spill: None of the components are listed.
Massachusetts Spill: None of the components are listed.
Massachusetts Substances: The following components are listed: GLYCERINE MIST; ETHYL ALCOHOL; DENATURED ALCOHOL; C.I. ACID BLUE 9, DISODIUM SALT
Michigan Critical Material: None of the components are listed.

Section 15. Regulatory information

Minnesota Hazardous Substances: None of the components are listed.

New Jersey Hazardous Substances: The following components are listed: GLYCERIN; 1,2,3-PROPANETRIOL; ETHYL ALCOHOL; ALCOHOL

New Jersey Spill: None of the components are listed.

New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.

New York Acutely Hazardous Substances: None of the components are listed.

New York Toxic Chemical Release Reporting: None of the components are listed.

Pennsylvania RTK Hazardous Substances: The following components are listed: 1,2,3-PROPANETRIOL; DENATURED ALCOHOL; ETHANOL

Rhode Island Hazardous Substances: None of the components are listed.

<u>Component name/Impurities</u>	<u>Cancer</u>	<u>Reproductive</u>	<u>No significant risk level</u>	<u>Maximum acceptable dosage level</u>
acetaldehyde	Yes.	No.	90 µg/day (inhalation)	No.

Canada

<u>Hazardous ingredients (Canada)</u>	<u>%</u>	<u>CAS number</u>
GLYCERIN	50 - 70	56-81-5

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).

Canadian lists

EPA Toxic substances: None of the components are listed.

Canadian ARET: None of the components are listed.

Canadian NPRI: The following components are listed: Ethanol

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.

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.

Section 16. Other information

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



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History

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Indicates information that has changed from previously issued version.

Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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