

## 1. IDENTIFICATION

### 1.1 Product identifiers

Product name: IMCStips®  
Product number: Any product number with the resin code: C03, M03, M04, M05, R10, R11, R19, R31, R32, R33, R34, R35, R36, R37, R38, R39, R71, R72, R77, R78, R80, R83, R84, R85 (except R85P), R86, R87, R90, R91, R92, R93, R96, or R97

### 1.2 Intended uses

Identified uses: Laboratory use: analytical chemistry, research, liquid chromatography.

### 1.3 Supplier information

Company: Integrated Micro-Chromatography Systems, Inc. (IMCS)  
110 Centrum Drive  
Irmo, SC 29063  
Telephone: +1 (888) 560-2073  
Website: www.imcstips.com

### 1.4 Emergency telephone number

Emergency Phone: VelocityEHS USA and Canada: +1 (800) 255-3924  
VelocityEHS International: +1 (813) 248-0585  
IMCS Technical Support: +1 (888) 560-2073

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

This product is considered hazardous by the OSHA (Occupational Safety and Health Administration) Hazard Communication Standard (29 CFR 1910.1200).

Flammable liquid and vapor – Category 3, H226

Causes eye irritation – Category 2B, H320

### 2.2 Label Elements



**WARNING:** Flammable liquid and vapor. Causes eye irritation. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Do not touch eyes. IF ON SKIN (or hair): Take off, immediately, all contaminated clothing. Rinse skin with water/shower. 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 help. In case of fire use dry sand, dry chemical, or alcohol resistant foam to extinguish. Store in a well-ventilated place. Keep cool. Dispose of contents/container to an approved waste disposal plant.

### 2.3 Other Hazards

No data available.

### 2.4 Unknown acute toxicity

No data available.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixture

See section 2 for full text of hazard statements.

CAS No.	Chemical Name	Component Hazard Classifications	%
64-17-5	Ethanol (ethyl alcohol)	H226, H320	15-25%

### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

General information: Avoid skin and eye contact with product. Consult physician if symptoms occur.

After inhalation: Supply fresh air; consult a physician if adverse health effects persist or are severe.

After skin contact: Immediately remove contaminated clothing and rinse skin with water. Consult physician if symptoms occur.

After eye contact: Immediately rinse opened eye for at least 15 minutes with running water. If present, remove any contact lenses. Continue rinsing. Consult physician if irritation occurs.

After swallowing: Rinse mouth with water. Give small quantities of water to drink if conscious. Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed to do so by medical personnel. Consult physician if symptoms persist or are severe.

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

Vapors may irritate respiratory system and eyes. Repeated exposure may lead to dry, cracked skin.

#### 4.3 Indication of any immediate medical attention and special treatment needed

If exposed or concerned, seek medical advice and attention. Treat symptomatically. Contact poison treatment specialist if large quantities have been ingested or inhaled.

### 5. FIREFIGHTING MEASURES

#### 5.1 Suitable extinguishing media

CO<sub>2</sub>, dry chemical, foam, or water spray.

#### 5.2 Unsuitable extinguishing media

No data available.

#### 5.3 Specialized hazards arising from the substance or mixture:

Runoff to sewer may create fire or explosion hazard. Container may burst with excessive heat or fire.

Hazardous combustion products: Carbon oxides (CO, CO<sub>2</sub>).

#### 5.4 Specialized protective equipment or precautions:

Exercise caution when fighting any chemical fire. Wear self-contained breathing apparatus for firefighting if necessary. Cool affected containers with plenty of water.

### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment, and emergency procedures

Remove all sources of ignition. Isolate the spill or leak. Ensure adequate ventilation. Wear protective clothing. Avoid contact with eyes, skin, and clothing. Avoid breathing vapors, mists, or sprays.

#### 6.2 Environmental precautions

Prevent entry to sewers or public waters.

## 6.3 Methods and materials for containment and clean up

Stop leak if safe to do so. Contain spills with dikes or absorbents to prevent entry into sewers or streams. Dilute with water and mop up, if water-soluble. Otherwise, soak up with inert absorbent materials (sand, diatomaceous earth, vermiculite). Containerize materials for proper disposal. Wash away remainder with plenty of water.

## 6.4 Reference to other sections

See section 7 for safe handling, section 8 for personal protection equipment, and section 13 for disposal information.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Wear personal protective equipment. Do not ingest. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wash hands and other exposed areas with soap and water after handling. Remove contaminated clothing when leaving work area. Use only non-sparking tools. Take precautionary measures against static discharge. Treat empty containers as product. Do not reuse containers.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in original container. Store tightly closed in a cool, dry, well-ventilated place protected from direct sunlight. Use appropriate containment to prevent environmental contamination. Recommended storage temperature is 2-8 °C. Store in accordance with local regulations.

Incompatible materials: ignition sources, oxidizing materials

### 7.3 Specific end use(s)

For research use only.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Components with workplace control parameters: See table.

### 8.2 Engineering controls

Ensure adequate ventilation. Use explosion-proof equipment and spark-proof tools. Wear personal protective equipment. Ensure safety shower and eyewash station are near work area.

Ethanol (64-17-5)	
PEL	1000 ppm (1900 mg/m <sup>3</sup> )
REL	1000 ppm (1900 mg/m <sup>3</sup> )
TLV-STEL	1000 ppm
ERPG-1/ERPG-2/ERPG-3	1800 ppm/3300 ppm/--

### 8.3 Protective equipment and hygiene

Breathing equipment: Not required under normal conditions of use.

Skin protection: Chemical-resistant, impervious gloves; protective clothing (lab coat).  
Glove material: butyl rubber or neoprene with 1-4 hours of breakthrough time.

Eye protection: Safety glasses with side-shields or goggles.

Hygiene: Wash hands and exposed skin thoroughly with soap and water after handling. Remove contaminated clothing before exiting work area.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid slurry contained in a pipette tip
Appearance:	White to off-white compact slurry
Odor:	Slightly alcohol-like
Odor threshold:	Ethanol= 180 ppm
pH:	No data available

<b>Melting point/range:</b>	No data available
<b>Freezing point/range:</b>	No data available
<b>Boiling point/range:</b>	No data available
<b>Flash point:</b>	Ethanol: closed cup: 38-43°C
<b>Evaporation rate:</b>	No data available
<b>Flammability (solid, gas):</b>	No data available
<b>Upper flammability or explosive limits:</b>	Ethanol= 19%
<b>Lower flammability or explosive limits:</b>	Ethanol= 3.3%
<b>Vapor pressure:</b>	Ethanol at 20°C= 42.95 mm Hg/5.7 kPa Water at 20°C= 23.8mm Hg/3.2 kPa
<b>Vapor density:</b>	No data available
<b>Relative density:</b>	No data available
<b>Solubility:</b>	Soluble in water
<b>Partition coefficient: n-octanol/water:</b>	No data available
<b>Auto-ignition temperature:</b>	Ethanol= 455°C
<b>Decomposition temperature:</b>	No data available
<b>Viscosity:</b>	No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity:** Hazardous reactions will not occur under normal conditions.

**10.2 Chemical stability:** Stable under recommended handling and storage conditions (see section 7).

**10.3 Possibility of hazardous reactions:** None expected under normal use.

**10.4 Conditions to avoid:** All sources of ignition: do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to heat or sources of ignition. Avoid incompatible materials.

**10.5 Incompatible materials:** Oxidizing materials

**10.6 Hazardous decomposition products:** None expected under normal conditions and use.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Acute toxicity

Not classified.

### 11.2 Primary irritant effect

On the skin: Repeated exposure may cause skin dryness or cracking.

On the eye: May cause irritation to eyes.

Sensitization: No data available.

### 11.3 Additional toxicological information

Adverse symptoms may include kidney and liver abnormalities as well as central nervous system (CNS) depression.

### 11.4 Carcinogenicity

IARC: Ethanol – only listed in the form of an alcohol beverage (Group 1)

ACGIH: Ethanol – TLV-A3: confirmed animal carcinogen with unknown relevance to humans.

Target organs: CNS, liver, kidney

Component Toxicity Information	
Ethanol (64-17-5)	
LD <sub>50</sub> Oral (Rat)	7,060mg/kg
LC <sub>50</sub> Inhalation (Rat)	20,000 ppm/10 h

## 12. ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity

Persistence and degradability: 100% - Readily - 20 days  
 Bio accumulative potential: Ethanol: BCF= 0.66; LogP<sub>ow</sub>= - 0.35; low potential  
 Mobility in soil: No further relevant information available.

### 12.2 Additional ecological information

General notes: Avoid release into the environment.  
 Other adverse effects: Runoff from fire control may cause pollution.

Component Ecotoxicity Information	
Ethanol (64-17-5)	
LC <sub>50</sub> <i>Artemia franchiscana</i> (Brine shrimp) static	27.00 mg/L/24 h 25.50 mg/L/48 h 7.00 mg/L/96 h
LC <sub>50</sub> <i>Oncorhynchus mykiss</i> (Rainbow trout)	13,000 mg/L/96 h
EC <sub>50</sub> <i>Pseudokirchneriella subcapitata</i> (Green algae)	8,090 µg/L/48 h
Tox Threshold (Cell Multiplication Inhibition Test) <i>Scenedesmus quadricauda</i> (Green algae)	5,000 mg/L

## 13. DISPOSAL CONSIDERATIONS

Dispose of product via a licensed waste disposal contractor. Treat uncleaned/unrinsed packaging the same as product. Vapor from residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld, or grind used containers unless cleaned thoroughly. Avoid product contact with soil, waterways, and sewers. Dispose of in accordance with local, state, and federal regulations.

## 14. TRANSPORT INFORMATION

This product is not regulated as dangerous goods for transport.

## 15. REGULATORY INFORMATION

### 15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture

SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)  
 Section 302/304 (40CFR355.30/40CFR355.40): Not applicable.  
 Section 311/312: 64-17-5 ethanol (flammable liquids/fire hazard)  
 TSCA (Toxic Substance Control Act) Active Listing: 64-17-5 ethanol; 7732-18-5 water

### 15.2 State regulations

Ethanol (64-17-5)
Massachusetts – Right to Know List
New Jersey – Right to Know List
Pennsylvania – Right to Know List

## 16. OTHER INFORMATION

The information in this document is based on the present state of knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. IMCS, Inc and its affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

**Date of Last Revision:** 02/26/2025

### Abbreviations and Acronyms

ACGIH: American Conference of Governmental Industrial Hygienists  
 BCF: Bioconcentration Factor  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 IARC: International Agency for Research on Cancer