Matrix Scientific

PO BOX 25067
COLUMBIA, SC 29224-5067
Telephone: 803-788-9494 Fax: 803-788-9419

MATERIAL SAFETY DATA SHEET

Transportation Emergency: 800-451-8346

1. Product Identification

Name Ethyl trifluoropyruvate

Catalog Number	003819
CAS Registry Number	[13081-18-0]
Company	Matrix Scientific
Physical Address	131 Pontiac Business Center Drive Elgin, SC 29045 USA
Telephone/Fax	(803)788-9494/(803)788-9419

2. Hazard Identification

Hazardous Ingredients Ethyl trifluoropyruvate

GHS label elements, including precautionary statements

Pictogram



Signal word DANGER

Hazard statement(s)

H205	May mass explode in fire
H226	Flammable liquid and vapour
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/ gas/mist/vapours/spray.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P411+235	Store at temperatures not exceeding 8°C . Keep cool.

3. Composition, Information or Ingredients

Flammable

Avoid prolonged exposure.
Do Not breathe vapor.
Use caution when handling.
Exposure to any chemical should be limited.
To the best of our knowledge, the health hazards of this product have not been fully investigated.
This product is provided solely for the purpose of research and development.

4. First Aid Measures

Eye Contact:	Check for and remove any contact lenses. Immediately flush eyes with clean, running water for at least 15 minutes while keeping eyes open. Cool water may be used. Seek medical attention.
Skin Contact:	After contact with skin, wash with generous quantities of running water. Gently and thoroughly wash affected area with running water and non-abrasive soap. Cool water may be used. Cover the affected area with emollient. Seek medical attention. Wash any contaminated clothing prior to reusing.
Inhalation:	Remove the victim from the source of exposure to fresh, uncontaminated air. If victim's breathing is difficult, administer oxygen. Seek medical attention.
Ingestion:	Do NOT induce vomiting. Give water to victim to drink. Seek medical attention.

5. Fire-Fighting Measures

Extinguishing media:	Carbon dioxide, dry chemical powder, alcohol or polymer foam.
Special fire fighting procedures:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Unusual fire and explosion hazards/ decomposition of product:	Emits toxic fumes under fire conditions.

6. Accidental Release Measures

Steps to be taken if material is spilled or otherwise released into the environment - Wear Appropriate respirator, impervious boots and heavy rubber (or otherwise impervious) gloves. Scoop up solid material or absorb liquid material and place into appropriate container. Ventilate area and wash affected spill area after pickup is complete. Wash skin immediately with plenty of water. Place solid or absorbed material into containers and close for disposal.

7. Handling and Storage

Refrigerate

Do not breath dust or vapor.
Have safety shower and eye wash available.
Do not get in eyes, on skin or on clothing.
Keep container tightly closed.
Store in a cool, dry, well-ventilated place.
Ensure adequate ventilation during use.
Use only in a chemical fume hood.

8. Exposure Controls and Personal Protection

Wear Protective safety goggles.
Wear chemical-resistant gloves.
Wear protective clothing and chemical resistant boots.
Ensure ventilation during use.
After contact with skin, wash immediately.

9. Physical and Chemical Properties

Appearance: liquid
Molecular Formula: C5H5F3O3
Molecular Weight: 170.09
Boiling point (C): 95-98°
Density (g/ml): 1.400
Flash point (C): 27°

10. Stability and Reactivity

Incompatibilities: Strong oxidizing agents
Strong acids and bases

Hazard Decomposition Products

Carbon carbon monoxide
carbon dioxide
Fluorine hydrogen fluoride

11. Toxicological Information

Acute effects:
Irritant
May be harmful by ingestion and inhalation.
Material is irritating to mucous membranes and upper respiratory tract.
To the best of our knowledge, the toxicological properties of this product have not been fully investigated or determined.

12. Ecological Information

Mobility: Data not known
Persistence and

degradability: No data available
Cumulative potential: No data available
Other adverse effects: No data available

13. Disposal Considerations

Absent other actions demanded by federal or local regulations - Dissolve or mix the material with a combustible solvent and burn in a requlated, chemical incinerator equipped with after burner and scrubber.
Observe all federal, state and local laws.

14. Transport Information

Shipping Name Esters, n.o.s.
Class / Sub-Class 3
UN Number UN3272
Packing Group Ⅲ
Inhalation Hazard Zone

15. Regulatory Information

Adhere to all Federal, State and local regulations.

16. Other Information

The information contained herein is accurate to the best of our knowledge, but is not meant to be complete and is included only as a guide. The end user is responsible for any damage resulting from handling or from contact with this product.