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 1,1,1,2,2-Pentafluoropropane

Catalog Number 001550

CAS Registry Number [1814-88-6]

Company Matrix Scientific

Physical Address 131 Pontiac Business Center Drive

Elgin, SC 29045

USA

Telephone/Fax (803)788-9494/(803)788-9419

2. Composition, Information or Ingredients

Hazardous Ingredients 1,1,1,2,2-Pentafluoropropane

GHS label elements, including precautionary statements

Pictogram

Signal word WARNING

Hazard statement(s)

H280 Contains gas under pressure; may explode if heated

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P403+233 Store in a well ventilated place. Keep container tightly closed.

3. Hazard Identification

Nonflammable Gas

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.

1 Last Updated 1/29/2015

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 nonabrasive 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

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

2 Last Updated 1/29/2015

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: gas

Molecular Formula: C3H3F5 Molecular Weight: 134.05 Boiling point (C): -18.3° Melting point (C): -81.1°

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 regulated, chemical incinerator equipped with after burner and scrubber.

Observe all federal, state and local laws.

14. Transport Information

3 Last Updated 1/29/2015 Shipping Name Liquefied gas, n.o.s.
Class / Sub-Class 2.2
UN Number UN3163
Packing Group
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.

4 Last Updated 1/29/2015