Safety Data Sheet

1. Identification of Substance/ Identification of Company

Product: TCFH
Catalog #: CXZ042
Chemical Formula: $C_5H_{12}ClF_6N_2P$
Synonyms: Chloro-N,N,N',N'-tetramethylformamidinium hexafluorophosphate

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against
Identified Uses: Laboratory chemicals, manufacture of substances

Supplier: AAPPTec, LLC
6309 Shepherdsville Road
Louisville, Kentucky USA
40228
Telephone: 502-968-2223
Fax: 502-968-3338

2. Hazards Identification

Classification of Substance or Mixture
GHS Classification in Accordance with 29 CFR 1910 (OSHA)
Skin Irritation (Category 2), H315
Eye Irritation (Category 2A), H319
Specific Target Organ Toxicity - Single Exposure (Category 3) Respiratory System, H335
For the full text of the H-Statements mentioned in this section, see Section 16

GHS label elements
Pictogram:

Signal word: Warning
Hazard statements:

H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation.

Precautionary statements:

P261	Avoid breathing dust.
P264	Wash skin thoroughly after handling
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves/eye protection/face protection
P302+P352	IF ON SKIN: Wash with plenty of soap and water
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a Poison Center or a doctor/physician if you feel unwell.

P321	Specific treatment (see supplemental first aid instructions)
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention
P362	Take of contaminated clothing and wash before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up
P501	Dispose of contents/container to an approved waste disposal plant.

Hazards Not Otherwise Classified (HNOC) or Not Covered by GHS: none

3. Composition/ information on ingredients

Substance/preparation: Substance
Chemical Name: Chloro-N,N,N',N'-tetramethylformamidinium hexafluorophosphate
Formula: $C_5H_{12}ClF_6N_2P$
Molecular Weight: 280.58
CAS #: [207915-99-9]
EC #: Not available

Hazardous Components

Component: Chloro-N,N,N',N'-tetramethylformamidinium hexafluorophosphate
Classification: Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H315, H319, H335
Concentration: -

For the full text of H-Statements mentioned in this section, see Section 16.

4. First Aid Measures

First Aid Measures

General:	Consult a physician. Show this safety date sheet to the doctor in attendance. Move out of dangerous area.
Inhalation:	If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin Contact:	Wash off with soap and plenty of water. Consult a physician.
Eye Contact:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Call a physician.

Most important symptoms and effects, both acute and delayed

The most important known symptoms are described in the labeling (Section 2) and/or in Section 11.

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Indication of any immediate medical attention and special treatment needed: No data available

5. Fire-fighting Measures

Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special Hazards Arising From the Substance or Mixture: carbon oxides, nitrogen oxides (NOx), oxides of phosphorous, hydrogen chloride gas, hydrogen fluoride

Advice for Firefighters: Wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Further Information: No data available

6. Accidental Release Measures

Personal Precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

Environmental Precautions: Do not allow product to enter drains.

Methods and Materials for Containment and Clean Up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to Other Sections: For disposal see Section 13

7. Handling and Storage

Handing: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition. – No smoking. Take measures to prevent electrostatic charge. For precautions see Section 2.

Conditions for Safe Storage, Including Any Incompatibilities: Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: 2 - 8 ˚C. Hygroscopic. Store under inert gas. Moisture sensitive. Exposure to moisture

Specific End Uses: Apart from the uses mentioned in Section 1, no other specific uses are stipulated.

8. Exposure Controls/Personal Protection

Exposure Limits

Contains no substances with occupational exposure limit values.

Engineering Measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal Protective Equipment

Eyes/Face: Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU).

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact with this product. Dispose of

contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact: Nitrile rubber gloves, minimum layer thickness 0.11 mm
Splash contact: Nitrile rubber gloves, minimum layer thickness 0.11 mm

Body Protection: Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific work place.

Respiratory: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of Environmental Exposure: Do not let product to enter drains

9. Physical and Chemical Properties

Physical State: Solid
Odor: No data available
Odor Threshold: No data available
pH: No data available
Melting Point: 100-106 °C (212-223 °F)
Boiling Point: No data available
Flash Point: No data available
Evaporation Rate: No data available
Flammability (solid, gas): No data available
Upper/Lower Flammability or Explosive Limits: No data available
Vapor Pressure: No data available
Vapor Density: No data available
Relative Density: No data available
Water Solubility: No data available
Partition Coefficient n-Octanol/Water: No data available
Auto-Ignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: No data available
Explosive Properties: No data available
Oxidizing Properties: No data available

Other Safety Information: No data available

10. Stability and Reactivity

Reactivity: No data available
Chemical Stability: Stable under recommended storage conditions.
Possiblity of Hazardous Reactions: No data available
Conditions to Avoid: No data available
Incompatible Materials: Strong oxidizing agents
Hazardous Decomposition Products: Other decomposition products: No data available
In the event of fire, see section 5.

11. Toxicological Information

Toxicological Effects
Acute Toxicology: No data available
Inhalation – No data available
Dermal – No data available
Skin Corrosion/Irritation: No data available
Serious Eye Damage/ Eye Irritation: No data available
Respiratory or Skin Sensitization: No data available
Germ Cell Mutagenicity: No data available
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA

Reproductive Toxicity: No data available
Specific Organ Toxicity – Single Exposure: Inhalation – May cause respiratory irritiation
Specific Organ Toxicity – Repeated Exposure: No data available
Aspiration Hazard: No data available
Additional Information
RTECS: Not available
Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

12. Ecological Information

Toxicity: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and PvBv assessment: No data available
Other adverse effects: No data available

13. Disposal Considerations

Waste Treatment Methods
Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated Packaging: Dispose of as unused product

14. Transportation

DOT (US)
Not dangerous goods.

IMDG
Not dangerous goods.

IATA

Not dangerous goods.

15. Regulatory Information

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313

SARA 311/312 Hazards: Acute health hazard

State Regulations:

Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act.

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Pennsylvania Right To Know Components:

Chloro-N,N,N',N'-tetramethylformamidinium hexafluorophosphate
CAS No: [207915-99-9]
Revision Date:

New Jersey Right To Know Components:

Chloro-N,N,N',N'-tetramethylformamidinium hexafluorophosphate
CAS No: [207915-99-9]
Revision Date:

California Prop. 65 Components:

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. Other Information

Full Text of the H-Statements Referred to Under Sections 2 and 3

Eye Irrit.	Eye irritation
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
Skin Irrit.	Skin Irritation
STOT SE	Specific target organ toxicity – single exposure

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

Health	**2**
Flammability	**0**
Physical Hazard	**0**
Chronic Health Hazard	

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

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