

**SECTION 1
CHEMICAL IDENTIFICATION OF THE SUBSTANCE/PREPARATION**

PRODUCT NAME: Custom Organic Standard: Perfluorotributylamine, also known as v-kit GCMS Autotune Standard or PFTBA
COMMON NAME OR SYNONYMS: Heptacosafuorotributylamine

Manufacturer/Supplier

NLG Analytical Ltd
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**SECTION 2
COMPOSITION AND INFORMATION ON INGREDIENTS**

INGREDIENT	%	TLV UNITS	CAS #	EINECS
N(CF ₂ CF ₂ CF ₂ CF ₃) ₃	100	N/A	311-89-7	206-223-1

**SECTION 3
HAZARDS IDENTIFICATION**

Irritant. Irritating to eyes, respiratory system and skin.

**SECTION 4
FIRST AID MEASURES**

Oral Exposure: If swallowed, wash out mouth with water provided person is conscious. Call a physician.
Inhalation Exposure: If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.
Dermal Exposure: In case of contact, immediately wash skin with soap and copious amounts of water.
Eye Exposure: In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

**SECTION 5
FIRE AND EXPLOSION DATA**

Flash Point N/A
Autoignition Temp N/A
Flammability N/A
Extinguishing Media: Suitable: Noncombustible. Use extinguishing media appropriate to surrounding fire conditions.
Firefighting: Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions.

**SECTION 6
ACCIDENTAL RELEASE MEASURES**

Procedure(s) of Personal Precaution(s): Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.
Methods for Cleaning up: Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

**SECTION 7
HANDLING AND STORAGE**

Handling: User Exposure: Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

**SECTION 8
EXPOSURE CONTROLS/PERSONAL PROTECTION**

Engineering Controls: Mechanical exhaust required. Safety shower and eye bath.
Personal Protective Equipment: Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Hand: Compatible chemical-resistant gloves. Eye: Chemical safety goggles.
General Hygiene Measures: Wash thoroughly after handling.

**SECTION 9
PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	Physical State: Liquid
Molecular Weight	671.1 AMU
pH	N/A
BP/BP Range	178 °C 760 mmHg
MP/MP Range	- 52.0 °C
Freezing Point	N/A
Vapor Pressure	1.3 mmHg 25 °C
Vapor Density	23.3 g/l
Saturated Vapor Conc.	N/A
SG/Density	1.89 g/cm ³

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SECTION 10 STABILITY AND REACTIVITY DATA

Stability: Stable. Materials to Avoid: Finely powdered metals, Alkali metals.

Hazardous Decomposition Products: Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Hydrogen fluoride, May also form perfluoroisobutylene.

Hazardous Polymerization: Hazardous Polymerization: Will not occur

SECTION 11 TOXICOLOGICAL INFORMATION

Route of Exposure: Skin Contact: Causes skin irritation. Skin Absorption: May be harmful if absorbed through the skin. Eye Contact: Causes eye irritation. Inhalation: May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract. Ingestion: May be harmful if swallowed.

Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Toxicity Data

RTECS Number: YA1000000

Oral Rat > 10000 mg/kg LD50

Intravenous Mouse 12 GM/KG LD50

SECTION 12 ECOLOGICAL INFORMATION

No data available.

SECTION 13 DISPOSAL CONSIDERATIONS

Appropriate Method of Disposal of Substance or Preparation: Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

SECTION 14 TRANSPORT INFORMATION

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

SECTION 15 OTHER REGULATORY INFORMATION

EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xi

Indication of Danger: Irritant.

R: 36/37/38

Risk Statements: Irritating to eyes, respiratory system and skin.

S: 26-36

Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Irritant.

Risk Statements: Irritating to eyes, respiratory system and skin.

Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

TSCA INVENTORY ITEM: Yes

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: Yes

SECTION 16 OTHER INFORMATION

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References:

The Sigma/Aldrich Library of Chemical Safety Data, Ed.I, (1985)

Registry of Toxic Effects of Chemical Substances, 1981-82

Patty's Industrial Hygiene and Toxicology, 3rd Revised Edition, Vol. 2A, 1981

Threshold Limit Values and Biological Exposure Indices for 1988-89, ACGIH

Dangerous properties of Industrial Materials by N. Irving Sax and Richard J. Lewis, Sr.(Ninth Edition) *

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