

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name: Pentafluorobenzonitrile Product Code: GEO-03210 CAS-No. : 773-82-0

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Company Identification: Georganics Ltd., Koreničova 1, 811 03 Bratislava, Slovak Republic

Phone Number: +421 33 6403132, Fax Number: +421 33 6403133, E-mail address: georganics@georganics.sk

1.4 Emergency Number Slovakia: National Toxicological Information Centre Tel: +421-2-54774166, Mob: +421 911 166 066

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquids Category 3 (H226)
 Acute oral toxicity Category 4 (H302)
 Acute dermal toxicity Category 4 (H312)
 Acute Inhalation Toxicity – Vapors Category 4 (H332)
 Skin Corrosion/irritation Category 2 (H315)

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

GHS pictogram:



H226 - Flammable liquid and vapor
 H302 - Harmful if swallowed
 H312 - Harmful in contact with skin
 H332 - Harmful if inhaled
 H315 - Causes skin irritation
 H319 - Causes serious eye irritation
 H335 - May cause respiratory irritation

Signal word:
Danger

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P312 - Call a POISON CENTER or doctor/ physician if you feel unwell
 IP304 + P340 - IF INHALED: Remove 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
 P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

2.3 Other hazards

None

SECTION 3 - COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms	Formula	Molecular Weight	CAS#	EC-No.
	C ₇ F ₅ N	193,075g/mol	773-82-0	212-259-9
Hazardous ingredients according to Regulation (EC) No 1272/2008				
Component	Classification			Concentration
Pentafluorobenzonitrile				
CAS#: 773-82-0	Flam. Liq. 3 (H226) Acute Tox. 3 (H302) Acute Tox. 3 (H312) Acute			<= 100%
EC-No: 212-259-9	Tox. 3 (H332) Skin Irrit. 2 (H315)			

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5 - FIRE-FIGHTING MEASURES**5.1 Extinguishing media**

Suitable extinguishing agents Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Cool closed containersexposed to fire with water spray

5.2 Special hazards arising from the substance or mixture - During a fire, irritating and toxic gases may be generated by thermal decomposition or combustion.

5.3 Advice for firefighters - Wear self-contained breathing apparatus and protective clothing to prevent contact with skin/eyes.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures - Wear protective equipment. Ensure adequate ventilation. Keep unprotected persons away. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash spill site after material pickup is complete.

6.2 Environmental precautions - Prevent further leakage or spillage if safe to do so. Do not let this chemical enter the environment.

6.3 Methods and materials for containment and cleaning up – Dispose of contaminated material as waste according to section 13. Ensure adequate ventilation

6.4 Reference to other sections - See Section 7 for information on safe handling. See section 8 for information on personal protection equipment. See Section 13 for information on disposal.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling - Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Ensure adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities - Flammables area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep away from heat and sources of ignition. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s) - No further relevant information available

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1 Control parameters****8.2 Exposure controls**

Engineering Controls: Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels. Safety shower and eye bath.

Personal Protective Equipment

Eyes: Wear chemical safety glasses.

Skin: Wear appropriate protective gloves and clothing to prevent skin exposure.

Clothing: Wear appropriate protective work clothing.

Respirators: Use breathing protection with high concentrations.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Form:	liquid	Flash Point:	29 °C
Color:	pale yellow	Specific Gravity/Density:	1.530
Boiling Point:	161 - 162 °C / 760 mmHg	Molecular Formula:	C ₇ F ₅ N
Freezing/Melting Point:	1 - 3 °C	Molecular Weight:	193,075

9.2 Other safety information - Not available

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity - No information known.

10.2 Chemical stability - Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions - Not available

10.4 Conditions to avoid - Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible materials - Oxidizing agents

10.6 Hazardous decomposition products - Thermal decomposition can lead to release of irritating gases and vapors. Hydrogenfluoride. Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

SECTION 11 - TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects**

Acute toxicity - Category 4

LD/LC50 values that are relevant for classification - No data

Skin irritation or corrosion - Category 2

Eye irritation or corrosion - Category 2

Sensitization - No data available.

Germ cell mutagenicity - No data available.

Carcinogenicity - There are no known carcinogenic chemicals in this product

Reproductive toxicity - No effects known.

Specific target organ system toxicity - repeated exposure: No data available

Specific target organ system toxicity - single exposure: No information available

Aspiration hazard - No data available

Subacute to chronic toxicity - No data available.

Additional toxicological information - The toxicological properties have not been fully investigated.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity - Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

12.2 Persistence and degradability - May persist, based on information available.

12.3 Bioaccumulative potential - May have some potential to bioaccumulate.

12.4 Mobility in soil - Spillage unlikely to penetrate soil The product is insoluble and sinks in water The product evaporates slowly Is not likely mobile in the environment due its low water solubility. Spillage unlikely to penetrate soil.

12.5 Results of PBT and vPvB assessment - No data available for assessment.

12.6 Other adverse effects - This product does not contain any known or suspected substance

SECTION 13 - DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated packaging

Dispose of this container to hazardous or special waste collection point. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.

SECTION 14 - TRANSPORT INFORMATION

14.1 UN number: ADR/RID: 1993 IMDG: 1993 IATA: 1993

14.2 UN proper shipping name:

ADR/RID: FLAMMABLE LIQUID, N.O.S (Pentafluorobenzonitrile)

IMDG: FLAMMABLE LIQUID, N.O.S (Pentafluorobenzonitrile)

IATA: FLAMMABLE LIQUID, N.O.S (Pentafluorobenzonitrile)

14.3 Transport hazard class(es)

ADR/RID: 3

IMDG: 3

IATA: 3

14.4 Packaging group

ADR/RID: III

IMDG: III

IATA: III

14.5 Environmental hazards: No hazards identified

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture - This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment - For this product a chemical safety assessment was not carried out

SECTION 16 - OTHER INFORMATION

The information contained in the SDS are compiled according to the present knowledge of the manufacturer. It does not represent any guarantee of the properties of the product. SDS shall be used only as a guide. Georganics Ltd. is not liable for damages incurred in the handling or contact with chemicals.