

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 03/08/2017 Revision date:

Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier	
Product form	: Substance
Substance name	: Perfluorotributylamine (PFTBA)
CAS-No.	: 311-89-7
Product code	: AL0-101613
Formula	: C12F27N
Synonyms	: PFTBA

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

1.2.1. Relevant identified uses

Main use category	: Laboratory use
Industrial/Professional use spec	: Industrial For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

1.4. Emergency telephone number

Emergency number

: ChemTel Assistance (US/Canada) 1-800-255-3924 ChemTel Assistance (International) +1 813-248-0585

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 3 H335

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC)	No. 1272/2008 [CLP]
Hazard pictograms (CLP)	: GHS07
Signal word (CLP)	: Warning
Hazard statements (CLP)	:H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation
Precautionary statements (CLP)	 P261 - Avoid breathing dust/fume/gas/mist/vapours/spray P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection
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P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water
P304+P340 - IF INHALED: Remove person to fresh air and keep 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
P308+P313 - IF exposed or concerned: Get medical advice/attention
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

No labelling applicable

ECTION 3: Composition/infor .1. Substances			
Name	: Perfluorotributylamine (PFTBA)		
CAS-No.	: 311-89-7		
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Perfluorotributylamine, MS Grade	(CAS-No.) 311-89-7	100	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
.2. Mixtures]	

SECTION 4: First and measures	
4.1. Description of first aid measures	
First-aid measures general	: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Get medical advice/attention.
First-aid measures after eye contact	 Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and effective states and effective symptometry and effective sympto	ffects, both acute and delayed
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
4.3. Indication of any immediate med	ical attention and special treatment needed
No additional information available	
SECTION 5: Firefighting measures	S
5.1. Extinguishing media	
Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from the	substance or mixture
No additional information available	
5.3. Advice for firefighters	
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release mo	easures
6.1. Personal precautions, protective	equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
Emergency procedures	Evacuate unnecessary personnel.

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according to Regulation (EC) No. 1907/2006 (REACH) with	
6.1.2. For emergency responders	
Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
Prevent entry to sewers and public waters. Notify	authorities if liquid enters sewers or public waters.
6.3. Methods and material for containmer	nt and cleaning up
Methods for cleaning up	: Take up in absorbent material. Collect spillage.
6.4. Reference to other sections	
See Heading 8. Exposure controls and personal p	protection.
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Use only outdoors or in a well-ventilated area.
Hygiene measures	: Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.
7.2. Conditions for safe storage, including	g any incompatibilities
Storage conditions	: Keep container tightly closed. Keep container tightly closed and in a well-ventilated place. Keep away from any flames or sparking source.
Incompatible materials	: Direct sunlight.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/perso	nal protection
8.1. Control parameters	
No additional information available	
8.2. Exposure controls	. Fither lead exhaust as concret some vertilation is very live any incl
Appropriate engineering controls	: Either local exhaust or general room ventilation is usually required.
Personal protective equipment	: Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.



Hand protection	 Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration.
Eye protection	: Chemical goggles or safety glasses. Safety glasses.
Skin and body protection	 Wear suitable protective clothing. Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.
Respiratory protection	: Wear appropriate mask.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and	d chemical properties	
Physical state	: Liquid	
Molecular mass	: 671.09 g/mol	
Colour	: Colourless.	
Odour	: characteristic.	
рН	: No data available	
Melting point	: No data available	
Freezing point	: No data available	
Boiling point	: 178 - 180 °C	
Flash point	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: Non flammable	
Relative density	: No data available	
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Density	: 1.88 g/ml
Solubility	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
9.2. Other information	
No additional information available	
SECTION 10: Stability and reactivity	
10.1. Reactivity	
No additional information available	
10.2. Chemical stability	
Not established.	
10.3. Possibility of hazardous reactions	
Not established.	
10.4. Conditions to avoid	
Direct sunlight. Extremely high or low temperature	95.
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition products	
No additional information available	
SECTION 11: Toxicological information	on
11.1. Information on toxicological effects	
, and the second s	Net deceleration
Acute toxicity	: Not classified
Acute toxicity Perfluorotributylamine (PETBA) (311-89-7)	
Perfluorotributylamine (PFTBA) (311-89-7)	
Perfluorotributylamine (PFTBA) (311-89-7) LD50 oral rat	> 10 g/kg
Perfluorotributylamine (PFTBA) (311-89-7)	> 10 g/kg
Perfluorotributylamine (PFTBA) (311-89-7) LD50 oral rat Perfluorotributylamine, MS Grade (311-89-7 LD50 oral rat	> 10 g/kg) > 10 g/kg
Perfluorotributylamine (PFTBA) (311-89-7) LD50 oral rat Perfluorotributylamine, MS Grade (311-89-7 LD50 oral rat Skin corrosion/irritation	<pre>> 10 g/kg) > 10 g/kg : Causes skin irritation.</pre>
Perfluorotributylamine (PFTBA) (311-89-7) LD50 oral rat Perfluorotributylamine, MS Grade (311-89-7 LD50 oral rat	> 10 g/kg) > 10 g/kg
Perfluorotributylamine (PFTBA) (311-89-7) LD50 oral rat Perfluorotributylamine, MS Grade (311-89-7 LD50 oral rat Skin corrosion/irritation	 > 10 g/kg > 10 g/kg : Causes skin irritation. : Causes serious eye irritation.
Perfluorotributylamine (PFTBA) (311-89-7) LD50 oral rat Perfluorotributylamine, MS Grade (311-89-7) LD50 oral rat Skin corrosion/irritation Serious eye damage/irritation	> 10 g/kg) > 10 g/kg : Causes skin irritation. : Causes serious eye irritation. Based on available data, the classification criteria are not met
Perfluorotributylamine (PFTBA) (311-89-7) LD50 oral rat Perfluorotributylamine, MS Grade (311-89-7) LD50 oral rat Skin corrosion/irritation Serious eye damage/irritation	> 10 g/kg > 10 g/kg : Causes skin irritation. : Causes serious eye irritation. Based on available data, the classification criteria are not met : Not classified
Perfluorotributylamine (PFTBA) (311-89-7) LD50 oral rat Perfluorotributylamine, MS Grade (311-89-7) LD50 oral rat Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation	 > 10 g/kg > 10 g/kg > 2 10 g/kg : Causes skin irritation. : Causes serious eye irritation. Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met
Perfluorotributylamine (PFTBA) (311-89-7) LD50 oral rat Perfluorotributylamine, MS Grade (311-89-7) LD50 oral rat Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation	 > 10 g/kg > 10 g/kg > 10 g/kg : Causes skin irritation. : Causes serious eye irritation. Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified
Perfluorotributylamine (PFTBA) (311-89-7) LD50 oral rat Perfluorotributylamine, MS Grade (311-89-7) LD50 oral rat Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity	 > 10 g/kg > 10 g/kg Causes skin irritation. Causes serious eye irritation. Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met
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Perfluorotributylamine (PFTBA) (311-89-7) LD50 oral rat Perfluorotributylamine, MS Grade (311-89-7) LD50 oral rat Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity	 > 10 g/kg > 10 g/kg Causes skin irritation. Causes serious eye irritation. Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met
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Perfluorotributylamine (PFTBA) (311-89-7) LD50 oral rat Perfluorotributylamine, MS Grade (311-89-7) LD50 oral rat Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT-single exposure	> 10 g/kg > 10 g/kg : Causes skin irritation. : Causes serious eye irritation. : Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : May cause respiratory irritation. : Not classified
Perfluorotributylamine (PFTBA) (311-89-7) LD50 oral rat Perfluorotributylamine, MS Grade (311-89-7) LD50 oral rat Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT-single exposure STOT-repeated exposure	> 10 g/kg > 10 g/kg : Causes skin irritation. : Causes serious eye irritation. Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : Not classified Based on available data, the classification criteria are not met : May cause respiratory irritation. : Not classified Based on available data, the classification criteria are not met : May cause respiratory irritation. : Not classified Based on available data, the classification criteria are not met
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12.1. Toxicity

No additional information available

12.2. Persistence and degradability

Perfluorotributylamine (PFTBA) (311-89-7)	
Persistence and degradability	Not established.

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12.3. Bioaccumulative potential	
Perfluorotributylamine (PFTBA) (311-89-7)	
Bioaccumulative potential	Not established.
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessme	nt
No additional information available	
12.6. Other adverse effects	
Additional information	: Avoid release to the environment
SECTION 13: Disposal consideration	hs
13.1. Waste treatment methods	
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / IATA / A	DN
14.1. UN number	
Not regulated for transport	
14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: Not regulated for transport
Proper Shipping Name (IATA)	: Not regulated for transport
Proper Shipping Name (IMDG)	: Not regulated for transport
Proper Shipping Name (ADN)	: Not regulated for transport
14.3. Packing group	
14.4. Packing group	
Not applicable	
14.5. Environmental hazards	
Other information	: No supplementary information available.
14.6. Special precautions for user	
14.6.1. Overland transport	
No additional information available	
14.6.2. Transport by sea	
No additional information available	
14.6.3. Air transport	
No additional information available	
14.6.4. Inland waterway transport	
Carriage prohibited (ADN)	: No
14.7. Transport in bulk according to Anne	ex II of MARPOL 73/78 and the IBC Code
Not applicable	
SECTION 15: Regulatory information	
	gulations/legislation specific for the substance or mixture
15.1.1. EU-Regulations	

No REACH Annex XVII restrictions Perfluorotributylamine (PFTBA) is not on the REACH Candidate List Perfluorotributylamine (PFTBA) is not on the REACH Annex XIV List

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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SECTION 16: Other information	
Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information	: None.

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