

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product name Perfluoro(2-methyl-3-pentanone)

### Other means of identification

Synonym PHK101

### Recommended use of the chemical and restrictions on use

Recommended use Extinguishing agents, cleaning agents, solvents  
 Uses advised against No information available

### Details of the supplier of the safety data sheet

Manufacturer: ICOOL INTERNATIONAL COMMERCE LIMITED  
 Address 2F Bldg 2 No.185 Tonghui Road Jiangbei District Ningbo Zhejiang China  
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## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

Hazardous to the aquatic environment, long-term (chronic) Category 3

### Label elements

Symbols/Pictograms None  
 Signal word None  
 Hazard statements H412 - Harmful to aquatic life with long lasting effects  
 Precautionary statements P273 - Avoid release to the environment  
 P501 - Dispose of contents/ container to an approved waste disposal plant

### Other hazards

No information available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Description Substance

Chemical name	CAS No	Weight_%
3-Pentanone, 1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-	756-13-8	>= 99.9

## 4. FIRST AID MEASURES

### Description of first aid measures

General advice	Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Vapors are heavier than air and can cause suffocation by reducing oxygen available for breathing. Administer oxygen if breathing is difficult. Get medical advice/attention if you feel unwell.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Not an expected route of exposure. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. Never give anything by mouth to an unconscious person.

### Most important symptoms and effects, both acute and delayed

No information available.

### Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

Suitable extinguishing media	The substance can be used as extinguishing agent. Wear suitable respiratory equipment to protect from harmful gases caused by thermal decomposition.
Unsuitable extinguishing media	No information available.

### Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors, such as carbon monoxide, carbon dioxide, hydrogen fluoride.

### Protective equipment and precautions for firefighters

Evacuate personnel to safe areas. Move containers from fire area if you can do it without risk. Cool drums with water spray. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Stay upwind. Ensure adequate ventilation, especially in confined areas.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Remove all sources of ignition. Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

### Environmental precautions

Local authorities should be advised if significant spillages cannot be contained. Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid release to the environment.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

Handle in accordance with good industrial hygiene and safety practice. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, flame and other sources of ignition. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition. Keep locked up and out of reach of children. Keep away from food, drink and animal feeding stuffs. Store in accordance with local regulations.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Exposure limits**

No data available

**Appropriate engineering controls**

Ensure adequate ventilation, especially in confined areas. Showers. Eyewash stations. Remove all sources of ignition.

**Individual protection measures, such as personal protective equipment**

Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Hand protection	Wear protective gloves.
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Wear suitable protective clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

Appearance	Liquid
Color	Colorless
Odor	Faint odor
Odor threshold	Not determined
pH	Not determined
Melting point/freezing point	-108.0 °C
Boiling point / boiling range	49.2 °C
Flammability (solid, gas)	Not flammable
Flammability limit in air	Not determined
Flash point	Not determined
Autoignition temperature	Not determined
Decomposition temperature	Not determined
Kinematic viscosity	Not determined
Dynamic viscosity	Not determined
Solubility(ies)	Practically insoluble in water
Partition coefficient (LogPow)	Not determined
Vapor pressure	0.3260 bar (20 °C)
Density	1.60 g/mL
Relative density	Not determined
Vapor density	11.6
Evaporation rate	Not determined
Explosive properties	Not an explosive
Oxidizing properties	Not determined

**Other information**

No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

No information available.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

Hazardous polymerization does not occur.

### Conditions to avoid

No information available.

### Incompatible materials

None known based on information supplied.

### Hazardous decomposition products

Carbon monoxide, carbon dioxide, hydrogen fluoride.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
3-Pentanone, 1,1,1,2,2,4,5,5,5-nonafluoro-4-(t rifluoromethyl)- (CAS #: 756-13-8)	> 2000 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	> 98 658 ppm ( Rat ) 4 h

### Skin corrosion/irritation

Non-irritating to the skin.

### Serious eye damage/eye irritation

No eye irritation.

### Sensitization

No sensitization responses were observed.

### Germ cell mutagenicity

No information available.

### Carcinogenicity

No information available.

### Reproductive toxicity

No information available.

### STOT - single exposure

No information available.

### STOT - repeated exposure

No information available.

### Aspiration hazard

No information available.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Chemical name	Algae/aquatic plants EC50	Fish LC50	Crustacea EC50
3-Pentanone, 1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)- (CAS #: 756-13-8)	10.6 mg/L 96h Pseudokirchneriella subcapitata	> 1 070 mg/L 96h Pimephales promelas	> 1 080 mg/L 48h Daphnia magna

### Persistence and degradability

Not readily biodegradable.

### Bioaccumulation

BCF = 1.2 - 4.8

### Mobility

No information available.

### Other adverse effects

No information available.

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

Waste from residues/unused products Disposal should be in accordance with applicable regional, national and local laws and regulations.  
Contaminated packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

## 14. TRANSPORT INFORMATION

UN number	Not regulated
UN proper shipping name	Not regulated
Hazard class	Not regulated
Packing group	Not regulated
Environmental hazards	Non-marine pollutant
Special precautions	No information available

Transport in bulk according to Annex II of MARPOL and the IBC Code Not applicable

## 15. REGULATORY INFORMATION

### International inventories

Component	AICS	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	TSCA
3-Pentanone, 1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)- 756-13-8 (>= 99 )	X	X	X	X	X	X	-	X

"-" Not Listed

"X" Listed