SAFETY DATA SHEET

SHTG-MSDS-FK5112		**Issue date**	15-Jan-2019
Version	4.0	**Revision Date**	26-Oct-2023
Product Name	Perfluoro(2-methyl-3-pentanone)		
UL File no.	EX27856		

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

Product identifier

Product name	SHTG 1230 (1,1,1,2,2,4,5,5,5- Nonafluoro-4-(Trifluoromethyl)-3-Pentanone)
CAS No	756-13-8

Other means of identification

Synonym	Dodecafluoro-2-methyl-3-pentanone / Perfluoro(2-methyl-3-pentanone)

Recommended use of the chemical and restrictions on use

Recommended use	Extinguishing agents, cleaning agents, solvents, hear transfer/cooling liquid
Uses advised against	No information available

Details of the supplier of the safety data sheet

Supplier	Safety Hi-Tech Global LLC
Address	16192 Coastal Highway, Lewes, Delaware, USA
ZIP	19958
Phone	+1 (302) 510-1465
E-mail	info@sht-global.com

Emergency telephone number

+1 (302) 510-1465

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-%
1,1,1,2,2,4,5,5,5- Nonafluoro-4-(Trifluoromethyl)-3-Pentanone	756-13-8	>= 99

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 applicable

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-(trifluoromethyl)- (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/ELINCS	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

16. OTHER INFORMATION

Revision notes

Issue date	15-Jan-2019
Revision date	18-Feb-2021
Revision date	22-Aug-2023
Revision notes	Update SDS preparation regulations and contents

Key or legend to abbreviations and acronyms used in the safety data sheet

TWA - TWA (Time Weighted Average)
STEL - STEL (Short Term Exposure Limit)
Ceiling - Maximum limit value
TSCA - Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
IECSC - Chinese Inventory of Existing Chemical Substances
EINECS/ELINCS - European Inventory of Existing Commercial chemical Substances/European LIst of Notified Chemical Substances
ENCS - Japanese Existing and New Chemical Substances
KECL - Korea Existing Chemicals List
NZIoC - New Zealand Inventory of Chemicals
PICCS - The Philippine Inventory of Chemicals and Chemical Substances
AICS - The Australian Inventory of Chemical Substances

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

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