

Kectone 5112



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations (According to HCS-2012 APPENDIX D TO §1910.1200)
Issue date: 11/24/2023 Revision date: 11/24/2023 Version: 23.11

SECTION 1: Identification

1.1. Identification

Product form	: Substance
Trade name	: Kectone 5112
IUPAC name	: 1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-3-pentanone
CAS-No.	: 756-13-8
EC-No.	: 436-710-6
Formula	: C6F12O

1.2. Recommended use and restrictions on use

Use of the substance/mixture	: Fire extinguishing agent.
Restrictions on use	: No information available

1.3. Supplier

Supplier

Hangzhou Kec Fire Chemical Co., Ltd.
2107-1-1, Xihu International Building, 391 Wener Road, Hangzhou, Zhejiang, China.
310012
T +86-571-86803376
info@kecfire.com

1.4. Emergency telephone number

Emergency number : 800-255-3925 - Contract# MIS0008074 (VelocityEHS)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not applicable under normal use in accordance with Occupational Safety & Health Administration (OSHA) 29 CFR 1910.1200.

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)	: Not applicable
Signal word (GHS US)	: Not applicable
Hazard statements (GHS US)	: Not applicable
Precautionary statements (GHS US)	: Not applicable

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

Kectone 5112



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations (According to HCS-2012 APPENDIX D TO §1910.1200)

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%
1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-3-pentanone	CAS-No.: 756-13-8 EC-No.: 436-710-6 EC Index-No.: 606-108-00-X	≥ 99.9 – ≤ 100

3.2. Mixtures

Not applicable.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : No information available.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Product is a fire-extinguishing agent.
Unsuitable extinguishing media	: Use a fire fighting agent suitable for the surrounding fire.

5.2. Specific hazards arising from the chemical

Fire hazard	: Product is a fire-extinguishing agent, and is non-flammable. Exposure to extreme heat can give rise to thermal decomposition.
Explosion hazard	: Not explosive.
Hazardous decomposition products in case of fire	: Toxic fumes may be released: Oxides of carbon.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Approach from upwind. Appropriate self-contained breathing apparatus may be required. Avoid all unnecessary exposure.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Do not attempt to take action without suitable protective equipment. Only qualified personnel

Kectone 5112



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations (According to HCS-2012 APPENDIX D TO §1910.1200)

Emergency procedures : equipped with suitable protective equipment may intervene.
: Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Seal the container.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid release to the environment. For industrial or professional use only. Do not use in a confined area or areas with little or no air movement.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool, well-ventilated place. Keep out of rain, moisture, direct sunlight and ultraviolet, keep away from incompatible materials, keep away from sources of heat or ignition. Keep drum tightly closed. Drums should be properly stored and secured to prevent falling or being knocked over.
Incompatible materials : Strong bases, amines, alcohols.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-3-pentanone (756-13-8)

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

Kectone 5112



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations (According to HCS-2012 APPENDIX D TO §1910.1200)

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves.

Eye protection:

Chemical goggles or safety glasses with side shields.

Skin and body protection:

Normal work wear.

Respiratory protection:

Wear respiratory protection if there is a risk of exposure to high vapor concentrations, aerosols or if material is exposed to extreme overheating. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear and colorless liquid
Colour	: Colorless
Odour	: Weak
Odour threshold	: No data available
pH	: Not Applicable
Freezing point	: -108°C
Boiling point	: 49°C[@ 760 mmHg]
Flash point	: No flash point
Evaporation rate	: > 1 Units not avail. or not appl. [Ref Std:BUOAC=1]
Flammability (solid, gas)	: Not applicable.
Vapour pressure	: 40.4kPa @ 21°C
Vapor Density	: 11.6 [Ref Std:AIR=1]
Partition coefficient n-octanol/water (Log Pow)	: 2.79 @ 25°C
Auto-ignition temperature	: Not Applicable
Decomposition temperature	: No data available
Viscosity	: 0.6 centipoise [@ 25 ° C]
Explosive limits	: No data available
Explosive properties	: Non explosive
Oxidising properties	: Non oxidising

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

Kectone 5112



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations (According to HCS-2012 APPENDIX D TO §1910.1200)

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Exposure to rain, moisture, direct sunlight. Ultraviolet light. Contact with incompatible materials.

10.5. Incompatible materials

Strong bases, amines, alcohols.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-3-pentanone (756-13-8)

LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	> 1275000mg/m ³
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified

1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-3-pentanone (756-13-8)

NOAEC (inhalation, fertility)	39173mg/m ³ (subacute, rat [common rodent species])
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-3-pentanone (756-13-8)

NOAEC (inhalation - systemic effects)	12450mg/m ³ ; subacute, rat [common rodent species]
NOAEC (inhalation - local effects)	12450mg/m ³ ; subacute, rat [common rodent species]
Aspiration hazard	: Not classified
Symptoms/effects	: No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Kectone 5112



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations (According to HCS-2012 APPENDIX D TO §1910.1200)

12.2. Persistence and degradability

1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-3-pentanone (756-13-8)

Persistence and degradability	Not readily biodegradable.
Biodegradation in water	under test conditions no biodegradation observed
Half-life for hydrolysis	2.5min @ 25°C

12.3. Bioaccumulative potential

1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-3-pentanone (756-13-8)

Partition coefficient n-octanol/water (Log Pow)	2.79 @ 25°C
Bioaccumulative potential	no bioaccumulation potential Absorption rate - oral (%): 50 Absorption rate - dermal (%): 50 Absorption rate - inhalation (%): 100

12.4. Mobility in soil

1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-3-pentanone (756-13-8)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.59 @20°C
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12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

DOT NA No	: Not regulated
UN-No. (TDG)	: Not regulated
UN-No. (IMDG)	: Not regulated
UN-No. (IATA)	: Not regulated

14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Not regulated
Proper Shipping Name (TDG)	: Not regulated
Proper Shipping Name (IMDG)	: Not regulated
Proper Shipping Name (IATA)	: Not regulated

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations (According to HCS-2012 APPENDIX D TO §1910.1200)

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not regulated

TDG

Transport hazard class(es) (TDG) : Not regulated

IMDG

Transport hazard class(es) (IMDG) : Not regulated

IATA

Transport hazard class(es) (IATA) : Not regulated

14.4. Packing group

Packing group (DOT) : Not regulated

Packing group (TDG) : Not regulated

Packing group (IMDG) : Not regulated

Packing group (IATA) : Not regulated

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

Not regulated

TDG

Not regulated

IMDG

Not regulated

IATA

Not regulated.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-3-pentanone	756-13-8	Present	Active	PMN

15.2. International regulations

CANADA

1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-3-pentanone (756-13-8)

Listed on the Canadian DSL (Domestic Substances List)

Kectone 5112



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations (According to HCS-2012 APPENDIX D TO §1910.1200)

EU-Regulations

1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-3-pentanone (756-13-8)

Listed on ELINCS (European List of Notified Chemical Substances)

National regulations

1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-3-pentanone (756-13-8)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on the Vietnam NCI (National Chemicals Inventory)

Listed on Thailand Existing Chemicals Inventory (DIW)

15.3. US State regulations

No additional information available

SECTION 16: Other information

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Version	: 23.11
Issue date	: 11/24/2023
Revision date	: 11/24/2023
Data sources	: LOLI. ECHA.
Training advice	: Normal use of this product shall imply use in accordance with the instructions on the packaging. Normal use of this product shall imply use in accordance with the instructions on the packaging and in line with the expectations of a professional user. Training staff on good practice.
Other information	: No information available.

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.