Chemical Safety Data Sheet MSDS / SDS

2'-FLUORO-6'-(TRIFLUOROMETHYL)ACETOPHENONE

Revision Date:2023-12-07 Revision Number:1

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

Product identifier

Product name	: 2'-FLUORO-6'-(TRIFLUOROMETHYL)ACETOPHENONE
CBnumber	: CB7465149
CAS	: 174013-29-7
Synonyms	: 1-[2-Fluoro-6-(trifluoromethyl)phenyl]ethanone,2'-FLUORO-6'-
	(TRIFLUOROMETHYL)ACETOPHENONE

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

Relevant identified uses	: For R&D use only. Not for medicinal, household or other use.
Uses advised against	: none
Company Identification	
Company	: Chemicalbook
Address	: Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing
Telephone	: 400-158-6606

SECTION 2: Hazards identification

GHS Label elements, including precautionary statements

Symbol(GHS)

Signal word

Warning

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continuerinsing.

P405 Store locked up.

Hazard statements

H227 Combustible liquid

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

SECTION 3: Composition/information on ingredients

Substance

Product name	: 2'-FLUORO-6'-(TRIFLUOROMETHYL)ACETOPHENONE
Synonyms	: 1-[2-Fluoro-6-(trifluoromethyl)phenyl]ethanone,2'-FLUORO-6'-
	(TRIFLUOROMETHYL)ACETOPHENONE
CAS	: 174013-29-7
MF	: C9H6F4O
MW	: 206.14

SECTION 4: First aid measures

Description of first aid measures

General advice

Consult a physician. Show this material 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. 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.

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

Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

Do NOT use water jet.

Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen fluoride

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Use water spray to cool unopened containers.

NFPA 704

	HEALTH	2	Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury (e.g. <u>diethyl</u> <u>ether</u> , ammonium phosphate, iodine)	
	FIRE	2	Must be moderately heated or exposed to relatively high ambient temperature before ignition can occur and multiple finely divided suspended solids that do not require heating before ignition can occur. Flash point between 37.8 and 93.3 °C (100 and 200 °F). (e.g. diesel fuel, <u>sulfur</u>)	
	REACT	0	Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, <u>N2</u>)	
	SPEC. HAZ.			

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Store in cool place.

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

control parameter

Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Body Protection

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full- face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

Information on basic physicochemical properties

OdourNo data availableOdour ThresholdNo data availablePHNo data availableMelting point/freezing pointNo data availableInitial boiling point and boiling range200.6±40.0 °C(Predicted)Flash point86 °C - closed cupEvaporation rateNo data availableFlammability (solid, gas)No data availableUpper/lower flammability or explosiveNo data availableImitsVapour pressureNo data availableVapour densityNo data availableRelative density1,326 g/cm3 at 25 °CVater solubilityNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableViscosityNo data availableViscosityNo data availableViscosityNo data availableExplosive propertiesNo data available	Appearance	colorless liquid
pHNo data availableMelting point/freezing pointNo data availableInitial boiling point and boiling range200.6±40.0 °C(Predicted)Flash point86 °C - closed cupEvaporation rateNo data availableFlammability (solid, gas)No data availableUpper/lower flammability or explosiveNo data availableImitisVapour pressureNo data availableVapour densityNo data availableRelative density1,326 g/cm3 at 25 °CWater solubilityNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableNo data availableNo data availablePartition temperatureNo data availableNo data availableNo data availableNo data availableNo data availableNo data availableNo data availablePartition coefficient: n-octanol/waterNo data availableNo data availableNo data availableAutoignition temperatureNo data availableNo data available <td>Odour</td> <td>No data available</td>	Odour	No data available
Melting point/freezing pointNo data availableInitial boiling point and boiling range200.6±40.0 °C(Predicted)Flash point86 °C - closed cupEvaporation rateNo data availableFlammability (solid, gas)No data availableUpper/lower flammability or explosiveNo data availableImitisVapour pressureNo data availableVapour densityNo data availableRelative density1,326 g/cm3 at 25 °CWater solubilityNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableViscosityNo data availableViscosityNo data available	Odour Threshold	No data available
Initial boiling point and boiling range200.6±40.0 °C(Predicted)Flash point86 °C - closed cupEvaporation rateNo data availableFlammability (solid, gas)No data availableUpper/lower flammability or explosiveNo data availablelimitsNo data availableVapour pressureNo data availableVapour densityNo data availableRelative density1,326 g/cm3 at 25 °CWater solubilityNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableViscosityNo data available	рН	No data available
Flash point86 °C - closed cupEvaporation rateNo data availableEvaporation rateNo data availableFlammability (solid, gas)No data availableUpper/lower flammability or explosiveNo data availablelimitsVapour pressureVapour pressureNo data availableVapour densityNo data availableRelative density1,326 g/cm3 at 25 °CWater solubilityNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableViscosityNo data available	Melting point/freezing point	No data available
Evaporation rateNo data availableFlammability (solid, gas)No data availableUpper/lower flammability or explosiveNo data availablelimitsVapour pressureNo data availableVapour densityNo data availableRelative density1,326 g/cm3 at 25 °CWater solubilityNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableViscosityNo data available	Initial boiling point and boiling range	200.6±40.0 °C(Predicted)
Flammability (solid, gas)No data availableUpper/lower flammability or explosiveNo data availablelimitsVapour pressureNo data availableVapour densityNo data availableRelative density1,326 g/cm3 at 25 °CWater solubilityNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableViscosityNo data available	Flash point	86 °C - closed cup
Upper/lower flammability or explosiveNo data availablelimitsVapour pressureNo data availableVapour densityNo data availableRelative density1,326 g/cm3 at 25 °CWater solubilityNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableViscosityNo data available	Evaporation rate	No data available
limitsVapour pressureNo data availableVapour densityNo data availableRelative density1,326 g/cm3 at 25 °CWater solubilityNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableViscosityNo data available	Flammability (solid, gas)	No data available
Vapour pressureNo data availableVapour densityNo data availableRelative density1,326 g/cm3 at 25 °CWater solubilityNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableViscosityNo data available	Upper/lower flammability or explosive	No data available
Vapour densityNo data availableRelative density1,326 g/cm3 at 25 °CWater solubilityNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableViscosityNo data available	limits	
Relative density1,326 g/cm3 at 25 °CWater solubilityNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableViscosityNo data available	Vapour pressure	No data available
Water solubilityNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableViscosityNo data available	Vapour density	No data available
Partition coefficient: n-octanol/water No data available Autoignition temperature No data available Decomposition temperature No data available Viscosity No data available	Relative density	1,326 g/cm3 at 25 °C
Autoignition temperatureNo data availableDecomposition temperatureNo data availableViscosityNo data available	Water solubility	No data available
Decomposition temperature No data available Viscosity No data available	Partition coefficient: n-octanol/water	No data available
Viscosity No data available	Autoignition temperature	No data available
•	Decomposition temperature	No data available
Explosive properties No data available	Viscosity	No data available
	Explosive properties	No data available
Oxidizing properties No data available	Oxidizing properties	No data available

Other safety information

No data available

SECTION 10: Stability and reactivity

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, Strong bases

Hazardous decomposition products

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity No data available Skin corrosion/irritation No data available Serious eye damage/eye irritation No data available Respiratory or skin sensitization No data available Germ cell mutagenicity No data available Carcinogenicity IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. **Reproductive toxicity** No data available Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation. Specific target organ toxicity - repeated exposure No data available Aspiration hazard No data available Additional Information **RTECS:** Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Other adverse effects

No data available

SECTION 13: Disposal considerations

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material

must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

UN number

ADR/RID: - IMDG: - IATA: -

UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

Packaging group

ADR/RID: - IMDG: - IATA: -

Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

Special precautions for user

No data available

Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulations on the Safety Management of Hazardous Chemicals

China Catalog of Hazardous chemicals 2015:Not Listed. website: https://www.mem.gov.cn/

Measures for Environmental Management of New Chemical Substances

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Not Listed. website: https://www.mee.gov.cn/ EC Inventory:Not Listed. European Inventory of Existing Commercial Chemical Substances (EINECS):Not Listed. website: https://echa.europa.eu/

Korea Existing Chemicals List (KECL):Not Listed. website: http://ncis.nier.go.kr

New Zealand Inventory of Chemicals (NZIoC):Not Listed. website: https://www.epa.govt.nz/

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Not Listed. website: https://emb.gov.ph/

United States Toxic Substances Control Act (TSCA) Inventory:Not Listed. website: https://www.epa.gov/

Vietnam National Chemical Inventory:Not Listed. website: https://chemicaldata.gov.vn/

SECTION 16: Other information

Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

- CAS: Chemical Abstracts Service
- EC50: Effective Concentration 50%
- IATA: International Air Transportation Association

IMDG: International Maritime Dangerous Goods

- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

STEL: Short term exposure limit

TWA: Time Weighted Average

References

- [1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- [2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
- [3] ECHA European Chemicals Agency, website: https://echa.europa.eu/
- [4] eChemPortal The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en

- [5] ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- [6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- [7] HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- [8] IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- [9] IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- [10] Sigma-Aldrich, website: https://www.sigmaaldrich.com/

Disclaimer:

appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.