# Chemical Safety Data Sheet MSDS / SDS

# 2-FLUORO-3-(TRIFLUOROMETHYL)PHENOL

Revision Date:2023-11-29 Revision Number:1

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

# **Product identifier**

| Product name                                                                  | : 2-FLUORO-3-(TRIFLUOROMETHYL)PHENOL                                                 |  |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|
| CBnumber                                                                      | : CB2297972                                                                          |  |
| CAS                                                                           | : 207291-85-8                                                                        |  |
| Synonyms                                                                      | : 2-Fluoro-3-(trifluoromethyl)phenol                                                 |  |
| 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.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

Continuerinsing.

#### Hazard statements

H335 May cause respiratory irritation

H332 Harmful if inhaled

H319 Causes serious eye irritation

H315 Causes skin irritation

H312 Harmful in contact with skin

H302 Harmful if swallowed

1

# SECTION 3: Composition/information on ingredients

# Substance

| Product name | : 2-FLUORO-3-(TRIFLUOROMETHYL)PHENOL |
|--------------|--------------------------------------|
| Synonyms     | : 2-Fluoro-3-(trifluoromethyl)phenol |
| CAS          | : 207291-85-8                        |
| MF           | : C7H4F4O                            |
| MW           | : 180.1                              |

# 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.

# 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

#### Advice on safe handling

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

#### Advice on protection against fire and explosion

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

#### **Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. For precautions see section 2.2.

### Conditions for safe storage, including any incompatibilities

#### Storage conditions

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

### Storage class

Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

# 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**

#### Personal protective equipment

#### Eye/face protection

Face shield and safety glasses 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

Complete suit protecting against chemicals, 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

| Appearance                              | colorless liquid   |
|-----------------------------------------|--------------------|
| Odour                                   | No data available  |
| Odour Threshold                         | No data available  |
| рН                                      | No data available  |
| Melting point/freezing point            | No data available  |
| Initial boiling point and boiling range | 122 °C - lit.      |
| Flash point                             | 62 °C - closed cup |
| Evaporation rate                        | No data available  |

| Flammability (solid, gas)              | No data available                                                             |
|----------------------------------------|-------------------------------------------------------------------------------|
| Upper/lower flammability or explosive  | No data available                                                             |
| limits                                 |                                                                               |
| Vapour pressure                        | No data available                                                             |
| Vapour density                         | No data available                                                             |
| Relative density                       | 1,431 g/cm3 at 25 °C - lit. No data available                                 |
| Water solubility                       | No data available                                                             |
| Partition coefficient: n-octanol/water | No data available                                                             |
| Autoignition temperature               | No data available                                                             |
| Decomposition temperature              | No data available                                                             |
| Viscosity                              | Viscosity, kinematic: No data available Viscosity, dynamic: No data available |
| Explosive 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

# Hazardous decomposition products

In the event of fire: see section 5

# SECTION 11: Toxicological information

# Information on toxicological effects

# Acute toxicity

Oral

LD50 Dermal - 1.100 mg/kg 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 No data available **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

# **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

# 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: 2811 IMDG: 2811 IATA: 2811

#### UN proper shipping name

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (2-Fluoro-3-(trifluoromethyl)phenol) IMDG: TOXIC SOLID, ORGANIC, N.O.S. (2-Fluoro-3-(trifluoromethyl)phenol) IATA: Toxic solid, organic, n.o.s. (2-Fluoro-3-(trifluoromethyl)phenol)

### Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

#### Packaging group

ADR/RID: III IMDG: III IATA: III

# **Environmental hazards**

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

### Special precautions for user

No data available

# SECTION 15: Regulatory information

### 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

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

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

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

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

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

European Inventory of Existing Commercial Chemical Substances (EINECS):Not Listed. website: https://echa.europa.eu/

EC Inventory:Not Listed.

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Not Listed. website: https://www.mee.gov.cn/

# **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:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the 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.