## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Product Description:
Cat No. :
5-(3-Methoxyphenyl)-2-furoic acid
Molecular Formula
MO01161CB; MO01161DA; MO01161EA; MO01161FL; MO01161ZZ
C12 H10 O4

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use
Uses advised against

Laboratory chemicals.
No Information available
1.3. Details of the supplier of the safety data sheet

Company

E-mail address begel.sdsdesk@thermofisher.com
1.4. Emergency telephone number

For information US call: 001-800-227-6701 / Europe call: +32 14575211
Emergency Number US:001-201-796-7100 / Europe: +32 14575299
CHEMTREC Tel. No. US:001-800-424-9300 / Europe:001-703-527-3887

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

## CLP Classification - Regulation (EC) No 1272/2008

Physical hazards
Based on available data, the classification criteria are not met

Health hazards
Skin Corrosion/Irritation

```
Serious Eye Damage/Eye Irritation
                                    Category 1 (H318)
Environmental hazards
Based on available data, the classification criteria are not met
```

Full text of Hazard Statements: see section 16


## Signal Word

## Danger

## Hazard Statements

H314-Causes severe skin burns and eye damage

## Precautionary Statements

P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P305 + P351 + P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and
easy to do. Continue rinsing
P310-Immediately call a POISON CENTER or doctor/physician
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

### 2.3. Other hazards

Decomposes in contact with water
This product does not contain any known or suspected endocrine disruptors

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

| Component | CAS No | EC No | Weight \% | CLP Classification - Regulation (EC) No <br> 1272/2008 |
| :---: | :---: | :---: | :---: | :---: |
| $5-(3-M e t h o x y p h e n y l)-2-f u r o i c ~ a c i d ~$ | $54022-96-7$ |  | $>97$ | Skin Corr. 1B (H314) |

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

| General Advice | Show this safety data sheet to the doctor in attendance. Immediate medical attention is <br> required. |
| :--- | :--- |
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. <br> Immediate medical attention is required. Keep eye wide open while rinsing. |
| Skin Contact | Wash off immediately with soap and plenty of water while removing all contaminated <br> clothes and shoes. Call a physician immediately. |
| Ingestion | Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water. <br> Never give anything by mouth to an unconscious person. |
| Inhalation | Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison <br> control center immediately. Do not use mouth-to-mouth method if victim ingested or inhaled <br> the substance; give artificial respiration with the aid of a pocket mask equipped with a <br> one-way valve or other proper respiratory medical device. |
| Self-Protection of the First Aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to <br> protect themselves and prevent spread of contamination. |
| 4.2. Most important symptoms and effects, both acute and delayed |  |$\quad$| Causes burns by all exposure routes. Product is a corrosive material. Use of gastric |
| :--- |
| lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should |
| be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue |
| and danger of perforation |

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

Notes to Physician Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

## Suitable Extinguishing Media

Carbon dioxide ( $\mathrm{CO}_{2}$ ). Dry chemical. Chemical foam. $\mathrm{CO}_{2}$, dry chemical, dry sand, alcohol-resistant foam.
Extinguishing media which must not be used for safety reasons
No information available.

### 5.2. Special hazards arising from the substance or mixture

The product causes burns of eyes, skin and mucous membranes.

## Hazardous Combustion Products

Carbon monoxide ( CO ), Carbon dioxide $\left(\mathrm{CO}_{2}\right)$.

### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.

### 6.2. Environmental precautions

Should not be released into the environment. Do not allow material to contaminate ground water system. See Section 12 for additional Ecological Information.

### 6.3. Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Use only under a chemical fume hood. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance.

## Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place.

Technical Rules for Hazardous Substances (TRGS) 510 Class 8A Storage Class (LGK) (Germany)

### 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

## Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

## Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

## Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL) <br> No information available

## Predicted No Effect Concentration (PNEC)

No information available.

### 8.2. Exposure controls

## Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.
Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

Eye Protection
Hand Protection

Goggles (European standard - EN 166)
Protective gloves

| Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments |
| :--- | :---: | :---: | :---: | :---: |
| Natural rubber | See manufacturers | - | EN 374 | (minimum requirement) |
| Butyl rubber | recommendations |  |  |  |
| Nitrile rubber |  |  |  |  |
| Neoprene |  |  |  |  |

## Skin and body protection Long sleeved clothing.

Inspect gloves before use.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)
Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.
Remove gloves with care avoiding skin contamination.

| Respiratory Protection | When workers are facing concentrations above the exposure limit they must use <br> appropriate certified respirators. <br> To protect the wearer, respiratory protective equipment must be the correct fit and be used <br> and maintained properly |
| :---: | :--- |
| Large scale/emergency use | Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits <br> are exceeded or if irritation or other symptoms are experienced <br> Recommended Filter type: Particulates filter conforming to EN 143 |
| Small scale/Laboratory use | Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure <br> limits are exceeded or if irritation or other symptoms are experienced. <br> Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN <br> 141 |
| When RPE is used a face piece Fit Test should be conducted |  |

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

| Physical State | Solid |  |
| :---: | :---: | :---: |
| Appearance | Off-white |  |
| Odor | No information available |  |
| Odor Threshold | No data available |  |
| Melting Point/Range | 169-170 ${ }^{\circ} \mathrm{C} / 336.2-338{ }^{\circ} \mathrm{F}$ |  |
| Softening Point | No data available |  |
| Boiling Point/Range | No information available |  |
| Flammability (liquid) | Not applicable | Solid |
| Flammability (solid,gas) | No information available |  |
| Explosion Limits | No data available |  |
| Flash Point | No information available | Method - No information available |
| Autoignition Temperature | No data available |  |
| Decomposition Temperature | No data available |  |
| pH | No data available |  |
| Viscosity | Not applicable | Solid |
| Water Solubility | Decomposes in contact with water |  |
| Solubility in other solvents | No information available |  |
| Partition Coefficient ( n -octanol/water) |  |  |
| Vapor Pressure | No data available |  |
| Density / Specific Gravity | No data available |  |
| Bulk Density | No data available |  |
| Vapor Density | Not applicable | Solid |
| Particle characteristics | No data available |  |
| 9.2. Other information |  |  |
| Molecular Formula | C12 H10 O4 |  |
| Molecular Weight | 218.21 |  |
| Evaporation Rate | Not applicable - Solid |  |

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

None known, based on information available
10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

## Hazardous Polymerization <br> Hazardous Reactions

10.4. Conditions to avoid
10.5. Incompatible materials

Strong oxidizing agents. Strong bases. Amines.
10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide ( $\mathrm{CO}_{2}$ ).

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

| Product Information | No acute toxicity information is available for this product |
| :---: | :---: |
| (a) acute toxicity; |  |
| Oral | No data available |
| Dermal | No data available |
| Inhalation | No data available |
| (b) skin corrosion/irritation; | Category 1 B |
| (c) serious eye damage/irritation; | Category 1 |
| (d) respiratory or skin sensitization; |  |
| Respiratory | No data available |
| Skin | No data available |
| (e) germ cell mutagenicity; | No data available |
| (f) carcinogenicity; | No data available |
|  | There are no known carcinogenic chemicals in this product |
| (g) reproductive toxicity; | No data available |
| (h) STOT-single exposure; | No data available |
| (i) STOT-repeated exposure; | No data available |
| Target Organs | No information available. |
| (j) aspiration hazard; | Not applicable Solid |
| Other Adverse Effects | The toxicological properties have not been fully investigated |


| Symptoms / effects,both acute andProduct is a corrosive material. Use of gastric lavage or emesis is contraindicated. <br> delayed |
| :--- |
|  |
|  |
|  |
| Possible perforation of stomach or esophagus should be investigated. Ingestion causes |
| severe swelling, severe damage to the delicate tissue and danger of perforation. |

### 11.2. Information on other hazards

Endocrine Disrupting Properties Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity <br> Ecotoxicity effects

Reacts with water so no ecotoxicity data for the substance is available.

| 12.2. Persistence and degradability | No information available |
| :--- | :--- |
| Persistence | Persistence is unlikely, based on information available. |
| Degradability | Decomposes in contact with water. |
| Degradation in sewage | Decomposes in contact with water. |
| treatment plant |  |

### 12.3. Bioaccumulative potential Product does not bioaccumulate due to reaction with water

12.4. Mobility in soil Decomposes in contact with water Is not likely mobile in the environment.
12.5. Results of PBT and vPvB Decomposes in contact with water.
assessment
12.6. Endocrine disrupting
properties
Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors
12.7. Other adverse effects

Persistent Organic Pollutant
Ozone Depletion Potential

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Waste from Residues/Unused Products

Other Information

Contaminated Packaging Dispose of this container to hazardous or special waste collection point.
European Waste Catalogue (EWC) According to the European Waste Catalog, Waste Codes are not product specific, but application specific.
Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not flush to sewer. Large amounts will affect pH and harm aquatic organisms.

## SECTION 14: TRANSPORT INFORMATION

## IMDG/IMO

| 14.1. UN number | UN3261 |
| :---: | :---: |
| 14.2. UN proper shipping name | Corrosive solid, acidic, organic, n.o.s. |
| Technical Shipping Name | 5-(3-Methoxyphenyl)-2-furoic acid |
| 14.3. Transport hazard class(es) | 8 |
| 14.4. Packing group | III |

ADR

| 14.1. UN number | UN3261 |
| :---: | :---: |
| 14.2. UN proper shipping name | Corrosive solid, acidic, organic, n.o.s. |
| Technical Shipping Name | 5-(3-Methoxyphenyl)-2-furoic acid |
| 14.3. Transport hazard class(es) | 8 |
| 14.4. Packing group | III |
| IATA |  |
| 14.1. UN number | UN3261 |
| 14.2. UN proper shipping name | Corrosive solid, acidic, organic, n.o.s. |
| Technical Shipping Name | 5-(3-Methoxyphenyl)-2-furoic acid |
| 14.3. Transport hazard class(es) | 8 |
| 14.4. Packing group | III |
| 14.5. Environmental hazards | No hazards identified |
| 14.6. Special precautions for user | No special precautions required. |
| 14.7. Maritime transport in bulk | Not applicable, packaged goods |
| according to IMO instruments |  |

## SECTION 15: REGULATORY INFORMATION

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

## International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZloC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component | CAS No | EINECS | ELINCS | NLP | IECSC | TCSI | KECL | ENCS | ISHL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $5-(3-M e t h o x y p h e n y l)-2-f u r o i c ~ a c i d ~$ | $54022-96-7$ | - | - | - | - | - | - | - | - |


| Component | CAS No | TSCA | TSCA Inventory <br> notification- <br> Active-Inactive | DSL | NDSL | AICS | NZloC | PICCS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $5-(3-M e t h o x y p h e n y l)-2-f u r o i c ~ a c i d ~$ | $54022-96-7$ | - | - | - | - | - | - | - |

Legend: X - Listed ' - ' - Not Listed KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

## Authorisation/Restrictions according to EU REACH Not applicable

| Component | CAS No | REACH (1907/2006) - <br> Annex XIV - Substances <br> Subject to Authorization | REACH (1907/2006) - <br> Annex XVII - Restrictions <br> on Certain Dangerous <br> Substances | REACH Regulation (EC <br> 1907/2006) article 59 <br> Candidate List of <br> Cubstances of Very High <br> Concern (SVHC) |
| :---: | :---: | :---: | :---: | :---: |
| 5-(3-Methoxyphenyl)-2-furoic acid | $54022-96-7$ | - | - | - |


| Component | CAS No | Seveso III Directive (2012/18/EC) - <br> Qualifying Quantities for Major Accident <br> Notification | Seveso III Directive (2012/18/EC) - <br> QualifyingQuantities for Safety Report <br> Requirements <br> R-(3-Methoxyphenyl)-2-furoic <br> acid$\quad$ Not applicable |
| :---: | :---: | :---: | :---: |

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals
Not applicable

Contains component(s) that meet a 'definition' of per \& poly fluoroalkyl substance (PFAS)?
Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

## National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment
WGK Classification Water endangering class $=3$ (self classification)

### 15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

## SECTION 16: OTHER INFORMATION

## Full text of H-Statements referred to under sections 2 and 3

H314 - Causes severe skin burns and eye damage
H318-Causes serious eye damage

## Legend

CAS - Chemical Abstracts Service
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
IECSC - Chinese Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances Substances List
ENCS - Japanese Existing and New Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZloC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit
TWA - Time Weighted Average
ACGIH - American Conference of Governmental Industrial Hygienists
DNEL - Derived No Effect Level
IARC - International Agency for Research on Cancer
RPE - Respiratory Protective Equipment
Predicted No Effect Concentration (PNEC)
LC50 - Lethal Concentration 50\%
NOEC - No Observed Effect Concentration
LD50 - Lethal Dose 50\%
EC50 - Effective Concentration 50\%
POW - Partition coefficient Octanol:Water
PBT - Persistent, Bioaccumulative, Toxic
vPvB - very Persistent, very Bioaccumulative

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road
IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code
OECD - Organisation for Economic Co-operation and Development
BCF - Bioconcentration factor
ICAO/IATA - International Civil Aviation Organization/International Air
Transport Association
MARPOL - International Convention for the Prevention of Pollution from
Ships
ATE - Acute Toxicity Estimate
VOC - (Volatile Organic Compound)
Key literature references and sources for data
https://echa.europa.eu/information-on-chemicals
Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

## SAFETY DATA SHEET

## Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.
Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.
First aid for chemical exposure, including the use of eye wash and safety showers.

| Revision Date | 25-Aug-2023 |
| :--- | :--- |
| Revision Summary | SDS sections updated, 1, 2, 9, 11, 12, 15, 16. |

## This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006

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

## End of Safety Data Sheet

