# AK Scientific, Inc.

**Safety Data Sheet** (United States) 2,3,4,5-Tetrafluoro-beta-oxobenzenepropanoic acid methyl ester

1.Identification	
Product name:	2,3,4,5-Tetrafluoro-beta-oxobenzenepropanoic acid methyl ester
Catalog#:	0383CV
IUPAČ name:	methyl 3-oxo-3-(2,3,4,5-tetrafluorophenyl)propanoate
Product use restrictions:	Only for research and development use by, or directly under the supervision
	of, a technically qualified individual.
Company:	AK Scientific, Inc.
	30023 Ahern Ave.
	Union City, CA 94587
Telephone:	(510) 429-8835
Fax:	(510) 429-8836
Website:	www.aksci.com
Emergency contact number	: 1-800-633-8253 United States & Canada
	1-801-629-0667 International

# 2.Hazard Identification:

# GHS Classification (United States)

Skin irritation (Category 2) Eye irritation (Category 2A) Specific target organ toxicity - single exposure (Category 3), Respiratory system

# Pictogram(s)



Signal word:

Warning

#### Hazard statement(s)

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

#### **Precautionary statement(s):**

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for
	breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses
	if present and easy to do. Continue rinsing.
P312	Call a poison center or doctor if you feel unwell.
P321	Specific treatment (see supplemental first aid instructions on this label).
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.

# Hazards not otherwise classified (HNOC) or not covered by GHS:

#### None

#### 3.Composition/Information on Ingredients

Synonyms: methyl

	3-oxo-3-(2,3,4,5-tetrafluorophenyl)propanoate;SCHEMBL8878086;2,3,4,5-tetrafluoro
	-beta-oxobenzenepropanoic acid methyl ester;ZINC166374166;AS-12041
CAS#:	111630-16-1
Purity:	95%
EC:	Not available.

### 4. First Aid Measures

**General Information:** Immediately remove any clothing contaminated by the product. Move out of dangerous area. Consult a physician and show this safety data sheet.

**Inhalation:** Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical aid.

**Skin contact:** Immediately flush skin with running water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Obtain medical aid immediately.

**Eye contact:** Immediately flush open eyes with running water for at least 15 minutes. Obtain medical aid immediately.

**Ingestion:** Do NOT induce vomiting without medical advice. Rinse mouth with water. Never administer anything by mouth to an unconscious person. Obtain medical aid immediately.

**Most important symptoms and effects, both acute and delayed:** No further information available. Please see sections 2 and 11.

**Indication of any immediate medical attention and special treatment needed:** No further information available.

#### 5. Fire Fighting Measures

**Suitable extinguishing media:** Use water spray, dry chemical, carbon dioxide, or chemical foam. **Specific hazards arising from the chemical:** Carbon oxides, Hydrogen fluoride.

**Advice for firefighters:** As in any fire, wear a NIOSH-approved or equivalent, pressure-demand, self-contained breathing apparatus and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

## 6. Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Wear protective equipment and keep unprotected personnel away. Ensure adequate ventilation. Remove all sources of ignition. Prevent further leak or spill if safe to do so. For personal protective equipment, please refer to section 8.

Environmental precautions: Do not let product enter drains, other waterways, or soil.

**Methods and materials for containment and cleaning up:** Prevent further leak or spill if safe to do so. Vacuum, sweep up, or absorb with inert material and place into a suitable disposal container. Consult local regulations for disposal. See section 13 for further disposal information.

#### 7. Handling and Storage

**Precautions for safe handling:** Avoid contact with skin, eyes, and personal clothing. Wash hands thoroughly after handling. Avoid breathing fumes. Use only with adequate ventilation. Wear suitable protective clothing, gloves, and eye/face protection. Keep away from sources of ignition. Minimize dust generation and accumulation. Keep container tightly closed. Open and handle container with care. Do

not eat, drink, or smoke while handling.

Conditions for safe storage, including any incompatibilities: Store in a tightly-closed

container when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from sources of ignition. ,Store long-term in a cool, dry place.

#### 8. Exposure Controls/Personal Protection

#### **Exposure limits:**

OSHA PEL: Not available. NIOSH REL: Not available. ACGIH TLV: Not available.

**Appropriate engineering controls:** Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product. Facilities storing or utilizing this material should be equipped with an eyewash fountain. Use adequate general and local exhaust ventilation to keep airborne concentrations low.

#### **Personal protection**

9. Physical and Chemical PropertiesPhysical State:Not available.Molecular Formula:C10H6F4O3Molecular Weight:250.15Odor:Not available.pH:Not available.Boiling Point Range:Not available.Freezing/Melting Point:Not available.Flash Point:Not available.Evaporation Rate:Not available.Flammability(solid,gas):Please see section 2.Explosive limits:Not available.Vapor Pressure:Not available.Solubility:Not available.Relative Density:Not available.Refractive Index:Not available.Volatility:Not available.Presture:Not available.Popping:Not available.Presture:Not available. <th>Eyes: Hands: Skin and body: Respiratory:</th> <th>Not Available. Not Available. Not Available. Not Available.</th>	Eyes: Hands: Skin and body: Respiratory:	Not Available. Not Available. Not Available. Not Available.
Molecular Formula:C10H6F4O3Molecular Weight:250.15Odor:Not available.pH:Not available.Boiling Point Range:Not available.Freezing/Melting Point:Not available.Freezing/Melting Point:Not available.Flash Point:Not available.Evaporation Rate:Not available.Flammability(solid,gas):Please see section 2.Explosive limits:Not available.Vapor Pressure:Not available.Vapor Density:Not available.Solubility:Not available.Relative Density:Not available.Refractive Index:Not available.Volatility:Not available.Auto-ignition Temperature:Not available.Decomposition Temperature:Not available.Permission Coefficient:Not available.	9. Physical and Chemical Properties	
	Physical State: Molecular Formula: Molecular Weight: Odor: pH: Boiling Point Range: Freezing/Melting Point: Flash Point: Evaporation Rate: Flammability(solid,gas): Explosive limits: Vapor Pressure: Vapor Density: Solubility: Relative Density: Refractive Index: Volatility: Auto-ignition Temperature: Decomposition Temperature:	C10H6F4O3 250.15 Not available. Not available. Not available. Not available. Not available. Please see section 2. Not available. Not available.

10. Stability and Reactivity	
Reactivity:	Not available.
Chemical stability:	Stable under recommended temperatures and pressures.
Possibility of hazardous reactions:	Not available.
Conditions to avoid:	Dust generation.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	Carbon oxides, Hydrogen fluoride.
11. Toxicological Information	

RTECS# Acute toxicity: Routes of exposure:

Not available. Not available. Inhalation,eye contact,skin contact,ingestion.

Carcinogenicity   IARC: Not classified.   NTP: Not listed.   OSHA: Not Available   Acute toxic effects: Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. <b>12. Ecological Information Ecotoxicity:</b> Persistence and degradability: Not available.   Bioaccumulative potential: Not available.   Mobility in soil: Not available.   Other adverse effects: Not available.   Disposal Considerations Disposal of packaging:   Disposal of packaging: Not listed   DOT (United States) UN number:   VDN number: Not available.   Packing group: Not available.   Packing group: Not available.   IATA UN Number:   Vost available. Not available.   Packing group: Not available.   Proper shipping name: Not availa
Ecotoxicity:Not available.Persistence and degradability:Not available.Bioaccumulative potential:Not available.Mobility in soil:Not available.Other adverse effects:Not available. <b>13. Disposal Considerations13. Disposal Considerations</b> Disposal of waste:Not listedDisposal of packaging:Not listed <b>14. Transportation Information14. Transportation InformationDOT (United States)</b> UN number:UN number:Not available.Proper shipping name:Not available.Praking group:Not available. <b>IATA</b> UN Number:UN Number:Not DGProper shipping name:Not DGProper shipping name:Not available.
Persistence and degradability:Not available.Bioaccumulative potential:Not available.Mobility in soil:Not available.Other adverse effects:Not available. <b>13. Disposal Considerations</b> Image: Disposal of waste:Disposal of waste:Not listedDisposal of packaging:Not listed <b>14. Transportation Information</b> Image: Dot (United States)UN number:Not hazmatProper shipping name:Not available.Transport hazard class:Not available.Packing group:Not available.IATAImage: Not DGUN Number:Not DGProper shipping name:Not available.
Bioaccumulative potential:Not available.Mobility in soil:Not available.Other adverse effects:Not available. <b>13. Disposal Considerations</b> Disposal of waste:Disposal of waste:Not listedDisposal of packaging:Not listed <b>14. Transportation Information</b> DOT (United States)UN number:Not hazmatProper shipping name:Not available.Transport hazard class:Not available.Packing group:Not available.IATAUN Number:Not DGProper shipping name:Not DGProper shipping name:Not available.
Mobility in soil:Not available.Other adverse effects:Not available. <b>13. Disposal Considerations</b> Not listedDisposal of waste:Not listedDisposal of packaging:Not listed <b>14. Transportation InformationVot Interded States</b> UN number:Not hazmatProper shipping name:Not available.Transport hazard class:Not available.Packing group:Not available.IATANot DGUN Number:Not DGProper shipping name:Not available.
Other adverse effects:Not available. <b>13. Disposal Considerations</b> Not listedDisposal of waste:Not listedDisposal of packaging:Not listed <b>14. Transportation InformationDOT (United States)DOT (United States)</b> Not hazmatUN number:Not available.Proper shipping name:Not available.Transport hazard class:Not available.Packing group:Not available. <b>IATA</b> Not DGUN Number:Not available.
Disposal of waste:Not listedDisposal of packaging:Not listed14. Transportation InformationDOT (United States)UN number:Not hazmatProper shipping name:Not available.Transport hazard class:Not available.Packing group:Not available.IATAUN Number:UN Number:Not DGProper shipping name:Not available.
Disposal of waste:Not listedDisposal of packaging:Not listed14. Transportation InformationDOT (United States)UN number:Not hazmatProper shipping name:Not available.Transport hazard class:Not available.Packing group:Not available.IATAUN Number:UN Number:Not DGProper shipping name:Not available.
Disposal of packaging:Not listed <b>14. Transportation InformationDOT (United States)</b> UN number:Not hazmatProper shipping name:Not available.Transport hazard class:Not available.Packing group:Not available.IATANot DGProper shipping name:Not available.
14. Transportation Information   DOT (United States)   UN number: Not hazmat   Proper shipping name: Not available.   Transport hazard class: Not available.   Packing group: Not available.   IATA UN Number:   VN Number: Not DG   Proper shipping name: Not available.
DOT (United States)UN number:Not hazmatProper shipping name:Not available.Transport hazard class:Not available.Packing group:Not available.IATAUN Number:Proper shipping name:Not DGProper shipping name:Not available.
UN number:Not hazmatProper shipping name:Not available.Transport hazard class:Not available.Packing group:Not available.IATAIUN Number:Not DGProper shipping name:Not available.
Proper shipping name:Not available.Transport hazard class:Not available.Packing group:Not available.IATAIATAUN Number:Not DGProper shipping name:Not available.
Transport hazard class:Not available.Packing group:Not available.IATANot DGUN Number:Not available.Proper shipping name:Not available.
Packing group:Not available.IATANot DGUN Number:Not available.Proper shipping name:Not available.
IATAUN Number:Not DGProper shipping name:Not available.
UN Number:Not DGProper shipping name:Not available.
Transport horzond alogg
Transport hazard class: Not available.
Packing group: Not available.
15. Regulatory Information
TSCA (United States)
Not Available.
California Proposition 65: Not Available
NFPA Rating: Health: Not available.
Flammability: Not available.
Instability: Not available.
16. Additional Information

Revision Date: 04/23/2022 Printed Date: 04/27/2022

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall AK Scientific be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if AK Scientific has been advised of the possibility of such damages.