# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

Page 1 / 8 Creation Date 08-May-2010 Revision Date 07-Apr-2024 Version 4

ACR39182

# 4-Acetamidoacetophenone

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

产品说明: 对乙酰基苯乙酮

Product Description: 4-Acetamidoacetophenone

Cat No.: 391820000; 391820050; 391820250

Synonyms 4-Acetylacetanilide; 4`-(N-Acetylamino)acetophenone; N1-(4-Acetylphenyl)acetamide

CAS No 2719-21-3 Molecular Formula C10 H11 N O2

Supplier UK entity/business name

Fisher Scientific UK Bishop Meadow Road,

Loughborough, Leicestershire LE11 5RG, United Kingdom

**EU entity/business name** Thermo Fisher Scientific

Janssen Pharmaceuticalaan 3a, 2440 Geel, Belgium

Emergency Telephone Number For information US call: 001-800-227-6701 / Europe call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

E-mail address begel.sdsdesk@thermofisher.com

Recommended Use Laboratory chemicals.
Uses advised against No Information available

# **SECTION 2. HAZARD IDENTIFICATION**

Physical State Appearance Odor

Powder Solid Beige No information available

# **Emergency Overview**

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation.

# Classification of the substance or mixture

| Acute Oral Toxicity                                | Category 4 |
|--|------------|
| Acute Inhalation Toxicity - Dusts and Mists        | Category 4 |
| Skin Corrosion/Irritation                          | Category 2 |
| Serious Eye Damage/Eye Irritation                  | Category 2 |
| Specific target organ toxicity - (single exposure) | Category 3 |

# **Label Elements**



Page 2/8 Revision Date 07-Apr-2024

# 4-Acetamidoacetophenone

Signal Word Warning

#### **Hazard Statements**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H302 + H332 - Harmful if swallowed or if inhaled

### **Precautionary Statements**

#### Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P271 - Use only outdoors or in a well-ventilated area

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

### Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove person to fresh air and keep 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

P330 - Rinse mouth

P362 + P364 - Take off contaminated clothing and wash it before reuse

#### Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

#### Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

#### **Physical and Chemical Hazards**

None identified.

# **Health Hazards**

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation.

### **Environmental hazards**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Is not likely mobile in the environment due its low water solubility. Spillage unlikely to penetrate soil.

This product does not contain any known or suspected endocrine disruptors.

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

|      | Component                | CAS No    | Weight % |
|------|--------------------------|-----------|----------|
| N-(p | o-Acetylphenyl)acetamide | 2719-21-3 | 98       |

# **SECTION 4. FIRST AID MEASURES**

### **Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

#### **Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

#### Inhalation

Remove to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention.

### Ingestion

Do NOT induce vomiting. Call a physician or poison control center immediately.

Page 3/8 Revision Date 07-Apr-2024

# 4-Acetamidoacetophenone

# Most important symptoms and effects

No information available.

#### Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

### **Notes to Physician**

Treat symptomatically.

# **SECTION 5. FIRE-FIGHTING MEASURES**

# **Suitable Extinguishing Media**

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

# Extinguishing media which must not be used for safety reasons

No information available.

### Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

# **SECTION 6. ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions**

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes or clothing.

# **Environmental Precautions**

Avoid release to the environment. See Section 12 for additional Ecological Information.

# Methods for Containment and Clean Up

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

Refer to protective measures listed in Sections 8 and 13.

# **SECTION 7. HANDLING AND STORAGE**

# Handling

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

#### Storage

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

#### Specific Use(s)

Use in laboratories

# **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control Parameters**

Page 4/8 Revision Date 07-Apr-2024

# 4-Acetamidoacetophenone

### **Monitoring methods**

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

# **Exposure Controls**

### **Engineering Measures**

Use only under a chemical fume hood. 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** Goggles (European standard - EN 166)

Hand Protection Protective gloves

| Glove material Nitrile rubber Neoprene Natural rubber | Breakthrough time<br>See manufacturers<br>recommendations | Glove thickness | EU standard<br>EN 374 | Glove comments<br>(minimum requirement) |
|---|---|-----------------|-----------------------|---|
| PVC   |   |                 |                       |   |

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.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced **Recommended Filter type:** Particulates filter conforming to EN 143

Recommended i liter type. I altitudates litter comorning to EN 140

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

**Recommended half mask:-** Particle filtering: EN149:2001 When RPE is used a face piece Fit Test should be conducted

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

AppearanceBeigePhysical StatePowder Solid

Odor No information available
Odor Threshold No data available
pH No information available

Page 5 / 8 Revision Date 07-Apr-2024

# 4-Acetamidoacetophenone

Solid

Solid

Melting Point/Range 166 - 170 °C / 330.8 - 338 °F

Softening Point No data available

Boiling Point/Range No information available

Flash Point No information available
Evaporation Rate Not applicable

Method - No information available
Solid

No information available

Evaporation Rate Not applicable Flammability (solid,gas) No information available

Explosion Limits

No information available

No data available

Vapor Pressure No data available

Vapor Density
Specific Gravity / Density
Bulk Density
Water Solubility
No data available
practically insoluble

Partition Coefficient (n-octanol/water)

Solubility in other solvents

Autoignition Temperature

Decomposition Temperature

Viscosity

No data available

No data available

No data available

Not applicable

Viscosity

Explosive Properties

Oxidizing Properties

Not applicable

No information available

No information available

Molecular Formula C10 H11 N O2

Molecular Weight 177.2

# **SECTION 10. STABILITY AND REACTIVITY**

**Stability** Stable under normal conditions.

Hazardous Reactions No information available.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid Avoid dust formation. Incompatible products. Excess heat.

Materials to avoid Strong oxidizing agents.

Hazardous Decomposition Products Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO2).

# **SECTION 11. TOXICOLOGICAL INFORMATION**

**Product Information** 

(a) acute toxicity;

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

**Respiratory**Skin
No data available
No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

Page 6/8 Revision Date 07-Apr-2024

# 4-Acetamidoacetophenone

(g) reproductive toxicity; No data available

(h) STOT-single exposure; Category 3

Results / Target organs Respiratory system

(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 and No information available

delayed

# **SECTION 12. ECOLOGICAL INFORMATION**

Ecotoxicity effects This product contains the following substance(s) which are hazardous for the environment.

| Component                   | Freshwater Fish | Water Flea | Freshwater Algae | Microtox              |
|-----------------------------|-----------------|------------|------------------|-----------------------|
| N-(p-Acetylphenyl)acetamide |                 |            |                  | EC50 = 112 mg/L 15    |
|                             |                 |            |                  | min                   |
|                             |                 |            |                  | EC50 = 134 mg/L 5 min |
|                             |                 |            |                  | EC50 = 95 mg/L 30 min |

Persistence and Degradability

Persistence Insoluble in water.

**Bioaccumulative Potential** May have some potential to bioaccumulate

Mobility in soil Spillage unlikely to penetrate soil Is not likely mobile in the environment due its low water

solubility

**Endocrine Disruptor Information Persistent Organic Pollutant** 

Ozone Depletion Potential

This product does not contain any known or suspected endocrine disruptors

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

# **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste from Residues/Unused

Products

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.

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used. Do not empty into drains.

# **SECTION 14. TRANSPORT INFORMATION**

**Page** 7/8 Revision Date 07-Apr-2024

# 4-Acetamidoacetophenone

**Road and Rail Transport** Not Regulated

IMDG/IMO Not regulated

IATA Not regulated

**Special Precautions for User** No special precautions required

# **SECTION 15. REGULATORY INFORMATION**

### International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

| Component                    | The<br>Inventory of<br>Hazardous<br>Chemicals<br>(2015<br>Edition) | • | TCSI | IECSC | EINECS    | TSCA | DSL | PICCS | ENCS | ISHL | AICS | KECL |
|------------------------------|--|---|------|-------|-----------|------|-----|-------|------|------|------|------|
| N-(p-Acetylphenyl)acet amide | -  | - | Х    | -     | 220-320-6 | -    | -   | -     | -    | Х    |      | -    |

# **National Regulations**

# **SECTION 16. OTHER INFORMATION**

**Creation Date** 08-May-2010 07-Apr-2024 **Revision Date Revision Summary** Not applicable.

# **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.

### 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

Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances

**ENCS** - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

TWA - Time Weighted Average

ACGIH - American Conference of Governmental Industrial Hygienists

IARC - International Agency for Research on Cancer

**DNEL** - Derived No Effect Level

PNEC - Predicted No Effect Concentration LD50 - Lethal Dose 50%

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50%

EC50 - Effective Concentration 50%

ACR39182

# SAFETY DATA SHEET

Page 8/8 Revision Date 07-Apr-2024

# 4-Acetamidoacetophenone

NOEC - No Observed Effect Concentration PBT - Persistent. Bioaccumulative. Toxic

POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

IMO/IMDG - International Maritime Organization/International Maritime

MARPOL - International Convention for the Prevention of Pollution from

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association** 

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**OECD** - Organisation for Economic Co-operation and Development

ATE - Acute Toxicity Estimate

Dangerous Goods Code

VOC - (Volatile Organic Compound)

**BCF** - Bioconcentration factor

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

### 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**