

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Creation Date 16-Nov-2011

Revision Date 06-Oct-2023

Revision Number 5

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

1.1. Product identifier

| Product Description: | 4-Acetamidobenzaldehyde |
|----------------------|--|
| Cat No. : | 400020000; 400020100; 400020250; 400021000 |
| Synonyms | 4-Formylacetanilide |
| CAS No | 122-85-0 |
| EC No | 204-579-2 |
| Molecular Formula | C9 H9 N O2 |

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

| Recommended Use | Laboratory chemicals. |
|----------------------|--------------------------|
| Uses advised against | No Information available |

1.3. Details of the supplier of the safety data sheet

Company

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

E-mail address

begel.sdsdesk@thermofisher.com

1.4. 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

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

Based on available data, the classification criteria are not met

4-Acetamidobenzaldehyde

Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

2.2. Label elements

None required

2.3. Other hazards

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 - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567 |
|--------------------------------|----------|-------------------|----------|---|
| Acetamide, N-(4-formylphenyl)- | 122-85-0 | EEC No. 204-579-2 | >95 | - |

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

| General Advice | If symptoms persist, call a physician. | |
|--|---|--|
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. | |
| Skin Contact | If skin irritation persists, call a physician. Wash off immediately with plenty of water for at least 15 minutes. | |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur. | |
| Inhalation | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. | |
| Self-Protection of the First Aider | No special precautions required. | |
| 4.2. Most important symptoms and effects, both acute and delayed | | |

None reasonably foreseeable.

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

Water spray. Carbon dioxide (CO 2). Dry chemical. Chemical foam.

Extinguishing media which must not be used for safety reasons No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO₂).

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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

6.2. Environmental precautions

Should not be released into the environment.

6.3. Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

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

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid dust formation. Do not get in eyes, on skin, or on clothing.

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.

4-Acetamidobenzaldehyde

7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Protect from direct sunlight.

Technical Rules for Hazardous Substances (TRGS) 510 Class 11 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)

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 equ Eye Protection | - | (European standard | I - EN 166) | | |
|--|---|--------------------|-----------------------|---|--|
| Hand Protection | Protectiv | ve gloves | | | |
| Glove material Nitrile rubber Neoprene Natural rubber | Breakthrough time See manufacturers recommendations | Glove thickness | EU standard EN 374 | Glove comments (minimum requirement) | |

4-Acetamidobenzaldehyde

Revision Date 06-Oct-2023

PVC

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 | No protective equipment is needed under normal use conditions. |
|----------------------------|---|
| 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 |
| Small scale/Laboratory use | Maintain adequate ventilation |

Environmental exposure controls No information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| Physical State | Powder Solid | |
|--|--|-----------------------------------|
| Appearance Odor Odor Threshold Melting Point/Range Softening Point Boiling Point/Range Flammability (liquid) Flammability (solid,gas) Explosion Limits | Light yellow Odorless No data available 154 - 158 °C / 309.2 - 316.4 °F No data available No information available No information available No data available | Solid |
| Flash Point Autoignition Temperature Decomposition Temperature pH | No information available Not applicable No data available No information available | Method - No information available |
| Viscosity Water Solubility Solubility in other solvents Partition Coefficient (n-octanol/wat | Not applicable Slightly soluble No information available | Solid |
| Vapor Pressure Density / Specific Gravity Bulk Density Vapor Density Particle characteristics | No information available No data available No data available Not applicable No data available | Solid |
| 9.2. Other information | | |
| Molecular Formula Molecular Weight Evaporation Rate | C9 H9 N O2 163.18 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. Light sensitive. | |
| 10.3. Possibility of hazardous reactions | | |
| Hazardous Polymerization Hazardous Reactions | No information available. None under normal processing. | |
| 10.4. Conditions to avoid | Exposure to light. Incompatible products. | |
| 10.5. Incompatible materials | Acids. Strong oxidizing agents. Strong bases. Ammonia. | |

10.6. Hazardous decomposition products

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION

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

| (a) acute toxicity; Oral Dermal Inhalation | No data available No data available No data available |
|--|--|
| (b) skin corrosion/irritation; | No data available |
| (c) serious eye damage/irritation; | No data available |
| (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 |
| (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 and delayed | No information available. |
| 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. |
| SE | CTION 12: ECOLOGICAL INFORMATION |
| <u>12.1. Toxicity</u> Ecotoxicity effects | Do not empty into drains. |
| 12.2. Persistence and degradability Persistence | based on information available, May persist. |
| 12.3. Bioaccumulative potential | May have some potential to bioaccumulate |
| | |

| 12.3. Bioaccumulative potential | May have some potential to bioaccumulate |
|--|--|
| <u>12.4. Mobility in soil</u> | The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility. Is not likely mobile in the environment due its low water solubility. Highly mobile in soils |
| 12.5. Results of PBT and vPvB assessment | No data available for assessment. |
| <u>12.6. Endocrine disrupting</u> properties Endocrine Disruptor Information | This product does not contain any known or suspected endocrine disruptors |

<u>12.7. Other adverse effects</u> Persistent Organic Pollutant Ozone Depletion Potential

4-Acetamidobenzaldehyde

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 | Waste is classified as hazardous. Dispose of in accordance with the European Directives |
|----------------------------|---|
| Products | 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. |
|--------------------------------|---|
| European Waste Catalogue (EWC) | According to the European Waste Catalog, Waste Codes are not product specific, but application specific. |
| 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

| IMDG/IMO | Not regulated |
|---|---|
| <u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> <u>14.4. Packing group</u> | |
| ADR | Not regulated |
| <u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> <u>14.4. Packing group</u> | |
| ΙΑΤΑ | Not regulated |
| <u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> <u>14.4. Packing group</u> | |
| 14.5. Environmental hazards | No hazards identified |
| 14.6. Special precautions for user | No special precautions required. |
| 14.7. Maritime transport in bulk according to IMO instruments | Not applicable, packaged goods |
| SE | CTION 15: REGULATORY INFORMATION |

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

International Inventories

4-Acetamidobenzaldehyde

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

| Component | CAS No | EINECS | ELINCS | NLP | IECSC | TCSI | KECL | ENCS | ISHL |
|--------------------------------|----------|-----------|---------|---------|-------|------|------|-------|-------|
| Acetamide, N-(4-formylphenyl)- | 122-85-0 | 204-579-2 | - | - | Х | Х | - | Х | Х |
| | | | | | | | | | |
| Component | CAS No | TSCA | TSCA In | ventory | DSL | NDSL | AICS | NZIoC | PICCS |
| - | | | notific | ation - | | | | | |
| | | | Active- | nactive | | | | | |
| Acetamide, N-(4-formylphenyl)- | 122-85-0 | Х | ACT | IVE | - | Х | - | Х | - |

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) - Annex XIV - Substances Subject to Authorization | J | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|--------------------------------|----------|---|---|---|
| Acetamide, N-(4-formylphenyl)- | 122-85-0 | - | - | - |

Seveso III Directive (2012/18/EC)

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|-----------------------------------|----------|---|--|
| Acetamide, N-(4-formylphenyl)- | 122-85-0 | Not applicable | 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 = 2 (self classification)

| Component | Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81) | Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC) | Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure |
|--|--|---|--|
| Acetamide, N-(4-formylphenyl)- 122-85-0 (>95) | Prohibited and Restricted Substances | | |

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

| Leg | gend |
|--|---|
| CAS - Chemical Abstracts Service | TSCA - United States Toxic Substances Control Act Section 8(b) Inventory |
| EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances | , |
| PICCS - Philippines Inventory of Chemicals and Chemical Substances | ENCS - Japanese Existing and New Chemical Substances |
| IECSC - Chinese Inventory of Existing 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 | Predicted No Effect Concentration (PNEC) |
| RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% | LD50 - Lethal Dose 50% EC50 - Effective Concentration 50% |
| NOEC - No Observed Effect Concentration | POW - Partition coefficient Octanol:Water |
| PBT - Persistent, Bioaccumulative, Toxic | vPvB - very Persistent, very Bioaccumulative |
| ADR - European Agreement Concerning the International Carriage of | ICAO/IATA - International Civil Aviation Organization/International Air |
| Dangerous Goods by Road | Transport Association |
| IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code | MARPOL - International Convention for the Prevention of Pollution from Ships |
| OECD - Organisation for Economic Co-operation and Development | ATE - Acute Toxicity Estimate |
| BCF - Bioconcentration factor | 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, R | IECS |

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.

| Creation Date | 16-Nov-2011 |
|------------------|-----------------|
| Revision Date | 06-Oct-2023 |
| Revision Summary | Not applicable. |

This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

Disclaimer

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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