coenza
dedicated to Coenzyme A

# MATERIAL SAFETY DATA SHEET

## Section No. 1 Identification of the substance and of the company/undertaking

**1.1. Product Identifier:** Acetyl Coenzyme A, Free acid

| | |
|---|---|
| SKU | A-20 |
| CAS No. | 72-89-9 |
| Index No. | N/A |
| EC No. | 631-193-5 |
| EINECS No. | N/A |
| HS Code | 2934 9990 90 |
| RTECS No. | N/A |
| REACH No. | Not registered |
| UFI No. | Not listed |

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

| | |
|---|---|
| Relevant identified uses | For research purposes only. |
| Uses advised against | Not for use by end consumers. |

**1.3. Details of the supplier of the safety data sheet**

| | |
|---|---|
| Name | Essential Phosphates UAB |
| Address | Mokslininkų g. 12<br>LT-08412, Vilnius<br>Lithuania |
| Telephone | +370 64729747 |
| Email | info@coenzalabs.com |

**1.4. Emergency telephone number**

| | |
|---|---|
| Manufacturers' phone | +370 64729747 |
| Lithuanian toxicological information centre | +370 5 236 20528<br>+370 687 53 378 |

## Section No. 2 Hazards Identification

**2.1. Classification of the substance**

**GHS Hazards Classification according to EU Regulation (EC) No 1272/2008.**

Skin Irritation, Category 2
Eye Irritation, Category 2
STOT SE 3

**2.2. Label elements**

Labelling according to Regulation (EC) No 1272/2008.

**Pictogram**

**Signal word(s)**

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. |
| P264 | Wash hands 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. |


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| | |
|---|---|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing |
| P332 + P313 | If skin irritation or rash occurs: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/attention. |
| P321 | Specific treatment (see supplemental first aid instructions on this label). |
| P362 | Take off contaminated clothing and wash before reuse. |

**Supplement Hazard Statements**

No information available.

**2.3. Other hazards**

The substance does not meet the criteria for PBT or vPvB substances in accordance with Annex XIII of Regulation (EC) No 1907/2006.

The substance does not meet the criteria for substances identified under Article 59 as having endocrine disrupting properties in accordance with Regulation (EC) No 1907/2006.

## Section No. 3 Composition / Information on Ingredients

**3.1. Substances**

| | |
|---|---|
| Component: | Acetyl Coenzyme A, Free acid |
| EINECS No. | N/A |
| Reach No. | Not registered |
| Formula: | $C_{23}H_{38}N_7O_{17}P_3S$ |
| Molecular Weight: | 809.57 g/mol (free acid basis) |
| CAS No. | 72-89-9 |
| Purity: | ≥ 95 % |
| Hazardous impurities | None |
| Stabilizers | None |

## Section No. 4 First Aid Measures

**4.1. Description of first aid measure**

| | |
|---|---|
| General information: | Consult a physician. Show this safety data sheet to the doctor in attendance. |
| If inhaled: | Move person to fresh air. If not breathing, give artificial respiration. Consult a physician. |
| In case of skin contact: | Wash affected area with soap and water. Consult a physician if any exposure symptoms are observed. |
| In case of eye contact: | Immediately rinse eyes with plenty of water for at least 15 minutes. Consult a physician.<br>Remove contact lenses.<br>If eye irritation persists, consult a specialist. |
| If swallowed: | Rinse mouth with plenty of water.<br>Do NOT induce vomiting unless advised to do so by a physician or Poison Control Centre. |
| Self-protection: | If needed protect yourself with FFP2 particle-filtering face mask.<br>Take off contaminated clothes after first aid and take a shower with a plenty of water to fully remove contaminants. |

**4.2. Most important symptoms and effects, both acute and delayed**

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated. Possible effects may be:

| | |
|---|---|
| Eye contact | Possible irritation, itching or redness. |
| Ingestion | Possible Irritation, nausea, vomiting. |
| Inhalation | Possible shortness of breath, coughing. |
| Skin contact | Possible irritation. |

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

No data available. Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.


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## Section No. 5 Fire and Explosion Data

| | | |
|---|---|---|
| **5.1.** | **Extinguishing media** | Suitable extinguishing media: Carbon dioxide, foam, alcohol-resistant foam, dry chemical or water spray |
| **5.2.** | **Special hazards arising from the substance or mixture** | Carbon oxides, nitrogen oxides, sulfur oxides, phosphorus oxides, in combustion may emit toxic fumes |
| **5.3.** | **Advice for firefighters** | Wear self-contained breathing apparatus (according to EN 137) for firefighting if necessary and full-body protective clothing |
| **5.4.** | **Additional information** | Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system. |

## Section No. 6 Accidental Release Measures

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

For non-emergency personnel

- Wear light protective suit, gloves and FFP2 particle filtering breathing mask.
- Avoid dust formation.
- Avoid breathing vapours, dust, mist or gas.
- Ensure adequate ventilation.
- Evacuate personnel to safe areas.

For emergency responders

- Protective equipment – wear respirator or breathing apparatus, protective suit, rubber boots and gloves as well as protective goggles.

**6.2. Environmental precautions**

Prevent further leakage or spillage of the substance. Take precautionary steps to avoid release of the substance into the environment.

**6.3. Methods and materials for containment and cleaning up**

Spilled product must be contained in suitable, closed containers for disposal (see Section 13). Disposal should be carried out in accordance with local applicable regulations. In case of large-scale product spillage inform the Fire Department and the Environmental Department of the Municipal Authority.

**6.4. Reference to other sections**

See section 7 for information on safe handling.
See section 8 for information on personal protection equipment.
See section 13 for information on disposal.

## Section No. 7 Handling and Storage

**7.1. Precautions for safe handling**

- Avoid contact with eyes and skin.
- Avoid formation of dust and aerosols.
- Provide appropriate ventilation at places where dust is formed.
- Normal measures for preventive fire protection.
- Do not eat, drink or smoke in areas where the substance is being handled.
- After work with the substance wash your hands and other open skin areas with water and liquid soap.
- Contaminated clothes or other protective gowning must be taken off prior entering other areas, where product was not handled.

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

Keep container tightly closed in a dry, cool and well-ventilated area. Recommended storage temperature -20°C.

The substance should be stored in areas protected from ignition source or open fire to prevent fire.

Recommendations for packaging: glass, polyethylene (PE), polypropylene (PP), polyamide (PA), polytetrafluoroethylene (PTFE).

Materials to be avoided: Substance must be protected from possible contact with strong basis and acids.

**7.3. Specific end user(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.


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## Section No. 8 Exposure Controls / Personal Protection

**8.1. Control parameters**

Contains no components with established occupational exposure limits.

**8.2. Exposure control**

**Appropriate engineering controls**

A laboratory fume hood or any other appropriate form of local exhaust ventilation shall be used to avoid exposure.

**Personal protective equipment**

For eye/face protection wear safety goggles or face shield. All used protective equipment should have been approved according to appropriate standards such as EN 166 (EU, CSA (Canada), NIOSH (US).

**Skin/Body protection**

- Handle with gloves.
- Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with the substance.
- Wear laboratory coat when handling small amounts of the substance. When working with the substance hood or adequate ventilation system is recommended.
- The selected protective gloves should satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
- The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

- In a poorly ventilated area wear FFP2, FFP3 or NIOSH approved N100 particle filtering breathing mask.
- If the respirator is the sole means of protection, use a full-face supplied air respirator.

**Environmental exposure controls**

Avoid release of substance into the environment (air, drains, soil and water).

## Section No. 9 Physical and Chemical Properties

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

| | |
|---|---|
| Physical state: | Powder to crystalline powder |
| Colour: | White to slightly yellow |
| Odour: | No data available |
| pH: | No data available |
| Melting point/range: | No data available |
| Initial boiling point/range: | No data available |
| Boiling point: | No data available |
| Flash point: | No data available |
| Upper explosion limit: | No data available |
| Lower explosion limit: | No data available |
| Vapor pressure: | No data available |
| Water solubility: | Soluble |
| Other solubilities: | No data available |
| Partition coefficient (n-Octanol / Water): | No data available |
| Ignition temperature (n-Octanol / Water): | No data available |
| Decomposition temperature: | No data available |
| Viscosity: | No data available |
| Explosive properties: | Not classified as explosive |
| Oxidizing properties: | None |

**9.2. Other information** No data available

## Section No. 10 Stability and Reactivity Data

| | |
|---|---|
| **10.1. Reactivity** | Reactive with strong acids, air. |
| **10.2. Chemical stability** | Stable under recommended storage conditions. |
| **10.3. Possibility of hazardous reactions** | No data available |
| **10.4. Conditions to avoid** | Moisture, heat. |


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| | |
|---|---|
| **10.5. Incompatible materials** | Protect against strong acids and bases, as well as oxidising agents. |
| **10.6. Hazardous decompositions products** | Hazardous decomposition products formed under fire conditions. Nature of decomposition products not known. |

## Section No. 11 Toxicological Information

**11.1. Information on toxicological effects**

| | |
|---|---|
| Acute toxicity | No data available |
| Skin corrosion/irritation | Based on practical experience substance does not cause corrosive or irritating effects on skin |
| Serious eye damage/irritation | The substance does not cause serious eye damage or irritation |
| Respiratory or skin sensitisation | Based on practical experience the substance does not cause sensitisation to the skin or the respiratory tract |
| Germ cell mutagenicity | No data available |
| Carcinogenicity | IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.<br>NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.<br>OSHA: No component of this product present at levels greater than or equal to 0.1% ison OSHA's list of regulated carcinogens. |
| Reproductive toxicity | No data available |
| Specific target organ toxicity - single exposure | No data available |
| Specific target organ toxicity - repeated exposure | No data available |
| Aspiration hazard | No data available |
| Additional information | No data available |

## Section No. 12 Ecological Information

| | |
|---|---|
| **12.1. Toxicity** | No data available |
| **12.2. Persistence and degradability** | No data available |
| **12.3. Bio-accumulative potential** | No data available |
| **12.4. Mobility in soil** | No data available |
| **12.5. Results of PBT and vPvB assessment** | Not applicable. |
| **12.6. Results of endocrine-disrupting properties** | Not applicable. |
| **12.7. Other adverse effects** | Discharge of material into the environment (water, soil etc.) must be avoided. |

## Section No. 13 Disposal Considerations

**13.1 Waste treatment methods**

| | |
|---|---|
| Product: | Do not discard unused product /substance into drainage system.<br>Product/substance cannot be discarded along with municipal waste.<br>Contact licensed professional waste disposal service<br>Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. |
| Contaminated packaging: | Empty and well cleaned containers should be taken to an approved waste handling site for Recycling or disposal.<br>Well cleaned containers may be submitted for recycling |

## Section No. 14 Transport Information

| | | |
|---|---|---|
| **14.1. UN Number** | ADN | None |
| | ADR/RID | None |


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| | | |
|---|---|---|
| | ICAO-TI / IATADGR | None |
| | IMDG | None |
| **14.2. UN Proper shipping name** | ADN | Not dangerous goods |
| | ADR/RID | Not dangerous goods |
| | ICAO-TI / IATADGR | Not dangerous goods |
| | IMDG | Not dangerous goods |
| **14.3. Transport hazard class** | ADN | Not applicable |
| | ADR/RID | Not applicable |
| | ICAO-TI / IATADGR | Not applicable |
| | IMDG | Not applicable |
| **14.4. Packaging group** | ADN | Not applicable |
| | ADR/RID | Not applicable |
| | ICAO-TI / IATADGR | Not applicable |
| | IMDG | Not applicable |
| **14.5. Environmental hazards** | ADN | Not applicable |
| | ADR/RID | Not applicable |
| | ICAO-TI / IATADGR | Not applicable |
| | IMDG | Not applicable |
| **14.6. Special precautions for user** | Substance should be transported in well-enclosed containers, protected from the light and heat at the time of transportation. Temperature shall not exceed 25°C. | |
| **14.7. Maritime transport in bulk according to IMO instruments** | Not applicable. | |

## Section No. 15 Other Regulatory Information

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

Regulation (EU) 649/2012 concerning the export and import of hazardous chemicals is not applicable

**15.2. Chemical Safety Assessment**

A Chemical Safety Assessment has not been required for this product.

## Section No. 16 Other Information

**16.1. Change Log**

| | |
|---|---|
| Version 1, 9 Sep, 2024 | Original publication |

**16.2. Abbreviations and definitions**

| | |
|---|---|
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| CAS | Chemical Abstracts Service |
| EN | European Norm |
| EU | European Union |
| IATA-DGR | International Air Transport Association - Dangerous Goods Regulations |
| IBC Code | International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals |
| ICAO-TI | International Civil Aviation Organization - Technical Instructions |
| IMDG | International Maritime Code for Dangerous Goods |
| IMO | International Maritime Organisation |
| MARPOL | Maritime Pollution Convention |
| PBT | Persistent, Bio accumulative, and Toxic |
| REACH | Registration, Evaluation, and Authorisation of Chemicals |
| RID | Agreement on the Transport of Dangerous Goods by Rail |
| UFI | Unique Formulation Identifier |
| UN | United Nations, or: four-digit identification number of the substance or article taken from the |
| UN | Model Regulations |
| vPvB | very Persistent and very Bio accumulative |

**16.3. List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements**


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None

**16.4. Advice on any training**

Employees, which are involved in any operations related to handling material, including manufacturing, packaging, handling or logistics should be familiar with the material safety data sheet.

**16.5. Statement / Disclaimer**

The purpose of information provided in the material safety data sheet is to ensure occupational health protection and safety, as well as environmental protection. All information provided in this material safety sheet to our best knowledge is believed to be accurate and representing current regulatory requirements. The above information was acquired by diligent search and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.


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