

Environmental Product Declaration



In accordance with ISO 14025 and EN 15804:2012+A2:2019 for:

Tecdrit (micronized)

from

Anhydritec



Programme:

The International EPD® System, www.environdec.com

Programme operator:

EPD International AB

EPD registration number:

S-P-04919

Publication date:

2021-12-01

Valid until:

2026-11-30

An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com

EPD Tecdrit 63 grams CO₂eq per kg



General information

Programme information

| | |
|-------------------|---|
| Programme: | The International EPD® System |
| Address: | EPD International AB Box 210 60 SE-100 31 Stockholm Sweden |
| Website: | www.environdec.com |
| E-mail: | info@environdec.com |

| |
|---|
| CEN standard EN 15804:A2 serves as the Core Product Category Rules (PCR) |
| Product category rules (PCR): PCR 2012:01. Construction Products and Construction Services. UN CPC Code: 152 Gypsum; anhydrite; limestone flux; limestone and other calcareous stone, of a kind used for the manufacture of lime or cement |
| PCR review was conducted by: IVL Swedish Environmental Research Institute |
| Independent third-party verification of the declaration and data, according to ISO 14025:2006: <input type="checkbox"/> EPD process certification <input checked="" type="checkbox"/> EPD verification |
| Third party verifier: Dr. Hudai Kara, Metsims Sustainability Consulting [www.metsims.com] |
| Approved by: The International EPD® System |
| Procedure for follow-up of data during EPD validity involves third party verifier: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but from different programmes may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804. For further information about comparability, see EN 15804 and ISO 14025.

Company information

Owner of the EPD: Anhydritec UK Ltd. part of the Minersa Group

Contact: Kevin Thomas National Sales Manager UK & Ireland

Description of the organisation:

Anhydritec® is the business unit of Minersa Group that transforms anhydrite, under the Tecdrit® brand name, into a component used in the formulation of adhesive mortars, cements and fertilisers.

Also, under the brands Gyvlon Screed & Gyvlonmobil, anhydrite is used to develop, produce and offer a wide range of anhydrite-based flowing screeds.

Product-related or management system-related certifications:

Anhydritec UK has global policy with regards to management system:

- ISO 9001: 2015:Quality management systems
- ISO 14021:1999: >95% Recycled material used
- ISO14001 Environmental management systems
- BES 6001 Responsible Sourcing (in progress)

Name and location of production site(s):

Anhydritec Ltd. Winsford works, Cheshire, CW7 3BU, UK

Product information

Product name: Tecdrit

Product identification Synthetic anhydrite

Product description:

Crushed and micronised synthetic anhydrite used as a component in the formulation of adhesive mortars, cements, aerated blocks, inerting, plastics and fertilisers.

UN CPC code: 152 Gypsum; anhydrite; limestone flux; limestone and other calcareous stone, of a kind used for the manufacture of lime or cement

Other codes for product classification:

| | |
|---------------------------|------------------|
| EINECS number | 231-900-3 |
| CAS number | 7778-18-9 |
| REACH registration number | 01-2119444918-26 |

LCA information

Functional unit / declared unit: 1 kg of Tecdrit

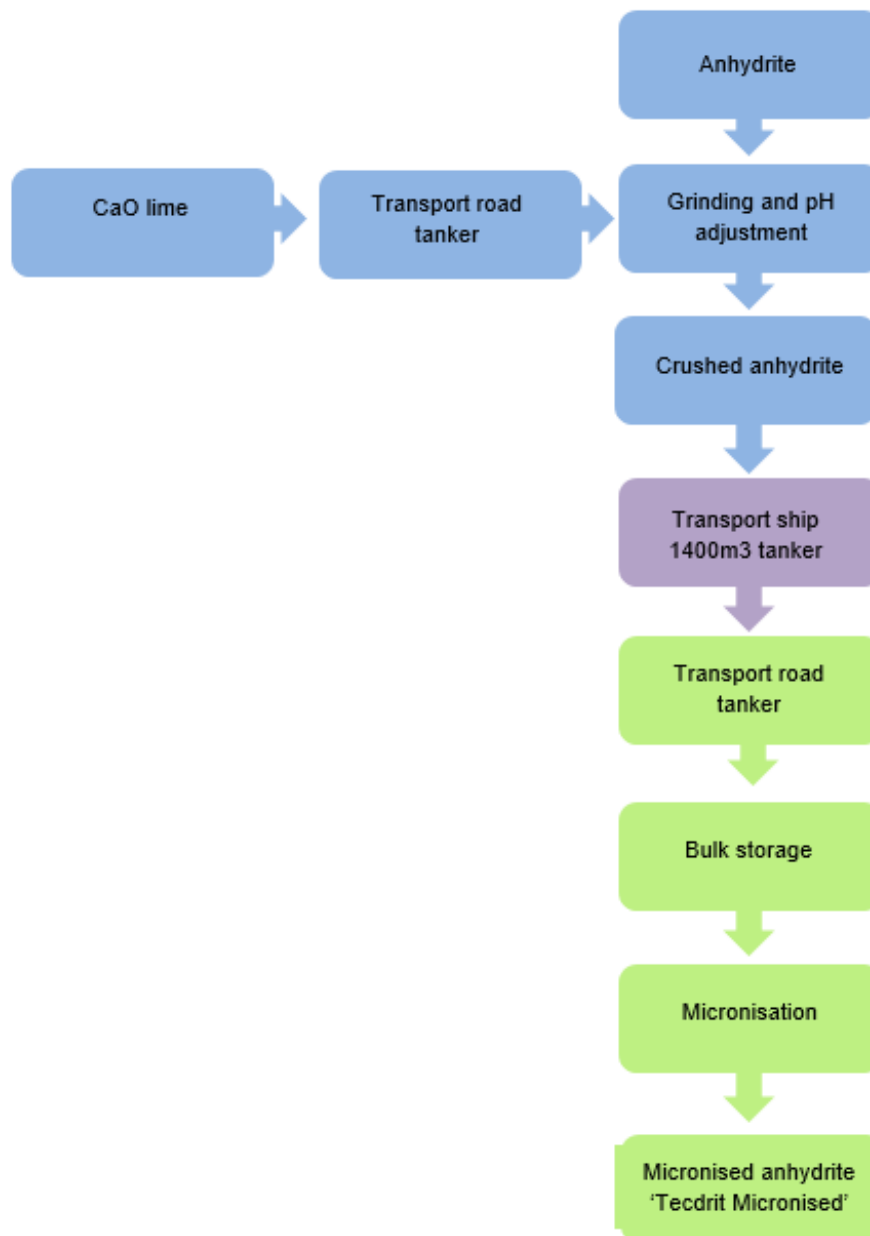
Reference service life: N/A

Time representativeness: N/A

Database(s) and LCA software used: Ecoinvent 3.7 with Simapro 9.1.0.7.

Description of system boundaries: Cradle to gate (A1–A3)

System diagram:



More information: This EPD is based upon an underlying LCA of the Anhydritec manufacturing process, with operational data obtained for 2019. The underlying LCA was conducted by Dr Callum Hill, senior consultant at Renuables Ltd (<http://renuables.co.uk>). All relevant inputs and outputs have been considered in the LCA. A standard GB electricity grid mix was used. For indicator values: As per EN 15804:2012+A2:2019. Higher heating value was used for all calculations involving primary energy resources (see www.environdec.com for more information). No cut-off criteria were applied.

This EPD contains information about environmental impact, use of resources and waste production in the form of quantitative indicators. The following abbreviations and have been used in the tables which quantify environmental performance:

| Indicator | Abbreviation |
|--|--------------|
| Global warming potential (Fossil, biogenic, land use and transformation (LUT)) | GWP |
| Depletion potential of the stratospheric ozone layer | ODP |
| Acidification potential | AP |
| Eutrophication potential | EP |
| Formation potential of tropospheric ozone | POCP |
| Abiotic depletion potential – Elements | ADPE |
| Abiotic depletion potential – Fossil resources | ADPF |
| Water scarcity potential | WSP |
| Primary energy resources – Renewable (use as energy carrier) | PERE |
| Primary energy resources – Renewable (use raw materials) | PERM |
| Primary energy resources – Renewable (total) | PERT |
| Primary energy resources – Non-renewable (use as energy carrier) | PENRE |
| Primary energy resources – Non-renewable (use raw materials) | PENRM |
| Primary energy resources – Non-renewable (total) | PENRT |
| Secondary material | SM |
| Renewable secondary fuels | RSF |
| Non-renewable secondary fuels | NRSF |
| Net use of fresh water | NUFW |
| Hazardous waste disposed | HWD |
| Non-hazardous waste disposed | NHWD |
| Radioactive waste disposed | RWD |
| Components for re-use | CFR |
| Material for recycling | MFR |
| Materials for energy recovery | MFER |
| Exported energy, electricity | EE-E |
| Exported energy, thermal | EE-T |

Modules declared, geographical scope, share of specific data (in GWP-GHG indicator) and data variation:

| | Product stage | | | Construction process stage | | Use stage | | | | | | | End of life stage | | | | Resource recovery stage |
|------------------|---------------------|-----------|---------------|----------------------------|---------------------------|-----------|-------------|--------|-------------|---------------|------------------------|-----------------------|----------------------------|-----------|------------------|----------|------------------------------------|
| | Raw material supply | Transport | Manufacturing | Transport | Construction installation | Use | Maintenance | Repair | Replacement | Refurbishment | Operational energy use | Operational water use | De-construction demolition | Transport | Waste processing | Disposal | Reuse-Recovery-Recycling-potential |
| Module | A1 | A2 | A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 | D |
| Modules declared | X | X | X | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |

Geographical Scope

Europe

Content information

| Product components | Weight, kg | Post-consumer material, weight-% | Renewable material, weight-% |
|---------------------|------------|----------------------------------|------------------------------|
| Gypsum | 0.98 | 0 | 0 |
| Additives | 0.02 | 0 | 0 |
| TOTAL | 1 | 0 | 0 |
| Packaging materials | Weight, kg | Weight-% (versus the product) | |
| None | 0 | 0 | |

| Dangerous substances from the candidate list of SVHC for Authorisation | EC No. | CAS No. | Weight-% per functional or declared unit |
|--|--------|---------|--|
| None | N/A | N/A | N/A |

Environmental Information

Potential environmental impact – mandatory indicators according to EN 15804

| Results per kg of Tecdrit (micronized) | | | | | | | | | | | | | | | | |
|--|--------------------------------------|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Indicator | Unit | A1-A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 | D |
| GWP-fossil | kg CO ₂ eq. | 6.48E-02 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| GWP-biogenic | kg CO ₂ eq. | 2.80E-05 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| GWP-luluc | kg CO ₂ eq. | 3.08E-05 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| GWP-total | kg CO ₂ eq. | 6.48E-02 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| ODP | kg CFC 11 eq. | 7.66E-09 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| AP | mol H ⁺ eq. | 5.69E-04 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| EP-freshwater | kg PO ₄ ³⁻ eq. | 6.49E-05 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| EP-marine | kg N eq. | 1.23E-04 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| EP-terrestrial | mol N eq. | 1.41E-03 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| POCP | kg NMVOC eq. | 3.79E-04 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| ADPE* | kg Sb eq. | 5.64E-08 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| ADPF* | MJ | 6.83E-01 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| WDP | m ³ | 5.19E-03 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |

* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.

Use of resources

| Results per kg of Tecdrit (micronized) | | | | | | | | | | | | | | | | |
|--|----------------|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Indicator | Unit | A1-A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 | D |
| PERE | MJ | 6.56E-02 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| PERM | MJ | 0.00E+00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| PERT | MJ | 6.56E-02 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| PENRE | MJ | 7.60E-01 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| PENRM | MJ. | 0.00E+00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| PENRT | MJ | 7.60E-01 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| SM | kg | 0.00E+00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| RSF | MJ | 0.00E+00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| NRSF | MJ | 0.00E+00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| FW | m ³ | 0.00E+00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |

Waste production and output flows

Waste production

| Results per kg of Tecdrit (micronized) | | | | | | | | | | | | | | | | |
|--|------|-----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Indicator | Unit | Tot.A1-A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 | D |
| HWD | kg | 5.98E-05 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| NHWD | kg | 1.15E-02 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| RWD | kg | 4.71E-06 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |

Output flows

| Results per kg of Tecdrit (micronized) | | | | | | | | | | | | | | | | |
|--|------|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Indicator | Unit | A1-A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 | D |
| CFR | kg | 0.00E+00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| MFR | kg | 0.00E+00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| MFER | kg | 0.00E+00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| EE-E | MJ | 0.00E+00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| EE-T | MJ | 0.00E+00 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |

Additional information

None

Information related to Sector EPD

N/A

Differences versus previous versions

N/A.

References

General Programme Instructions of the International EPD® System. Version 3.01.

PCR 2012:01. Construction Products and Construction Services.

EN 13813 Screed material and floor screeds. Screed material. Properties and requirements.

EN 15804:2012+A2:2019, Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products.

