

ENVIRONMENTAL PRODUCT DECLARATION

In accordance with ISO 14025 and EN 15804+A2 

Tarmac Holdings Limited Trucal



Owner of the declaration

Tarmac Holdings Limited
Ground Floor, T3 Trinity Park, Bickenhill
Lane
B37 7ES Birmingham
United Kingdom

Product

Trucal

Declared product / Declared unit

1 t

This declaration is based on Product Category Rules

EN 15804:2012 + A2:2019,
NPCR Part A:2021 ,
NPCR 018 Part B for Natural Stone,
Aggregates, and Fillers

Program operator:

EPD Global
Majorstuen P.O. Box 5250
N-0303 Oslo
Norway

Declaration number

NEPD-10988-10988-2

Registration number

NEPD-10988-10988-2

Issue date

18.02.2026

Valid to

17.02.2031

EPD Software

Emidat Platform v1.0.0

General Information

Product

Trucal

Program Operator

EPD Global
 Majorstuen P.O. Box 5250
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 Norway
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Declaration Number

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EN 15804:2012 + A2:2019,
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 Fillers

Statements

The owner of the declaration shall be liable for the underlying information and evidence. The Norwegian EPD Foundation shall not be liable with respect to manufacturer, life cycle assessment data and evidences.

Declared unit

1 t

General information on verification of EPD from EPD tools

Independent verification of data, other environmental information and the declaration according to ISO 14025:2010, § 8.1.3 and § 8.1.4. Verification of each EPD is made according to EPD Global's guidelines for verification and approval requiring that tools are i) integrated into the company's environmental management system, ii) the procedures for use of the EPD tool are approved by EPD Global, and iii) the process is reviewed annually by an independent third party verifier. See Appendix G of EPD Global's General Programme Instructions for further information on EPD tools.

Verification of EPD tool

Charlotte Merlin, FORCE Technology
 (no signature required)

Owner of the declaration

Tarmac Holdings Limited

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Manufacturer

Tarmac Holdings Limited
 Ground Floor, T3 Trinity Park, Bickenhill Lane
 B37 7ES Birmingham, United Kingdom

Place of production

Ashbourne, United Kingdom

Management system

ISO 9001 , ISO 14001 , ISO 45001 , ISO 50001 , BES 6001

Issue date

18.02.2026

Valid to

17.02.2031

Year of study

2024

Comparability

EPDs of construction products may not be comparable if they do not comply with EN 15804 and are not seen in a building context. EPD data may not be comparable if the datasets used are not developed in accordance with EN 15804 and if the background systems are not based on the same database (including primary and secondary data).

Development and verification of EPD

The declaration was created using the Emidat EPD tool v1.0, developed by Emidat GmbH. The EPD tool has been approved by EPD Global.

Developer of EPD: Rebecca Eccles

Reviewer of company-specific input data and EPD: Amall Saleh

Approved



Håkon Hauan, The Norwegian EPD Foundation

Product

Product description

Trucal is a range of high-purity, crushed and screened limestone products available in a variety of controlled granular sizes. Unlike the Trucarb powders, Trucal products are coarser, offering excellent physical stability, low impurities, and consistent grading. The range is designed to meet the needs of industries requiring precise particle size distribution and reliable mineral performance.



Trucal is commonly used in animal feed, agriculture, glass manufacturing, and environmental treatment processes where controlled granulation and high calcium content are essential. In feed and nutrition applications, it provides a dependable source of bioavailable calcium. In industrial processes, its consistent particle size supports predictable melting behaviour, filtration performance, or chemical reactivity, depending on the sector's requirements.

Product specification

Name of ingredient	Share of total weight	Country of origin
Aggregates	100 %	United Kingdom

Technical data

	Unit	Value
Gross density	kg / m ³	1500

Market

United Kingdom

Recipients

B2B

LCA: Calculation rules

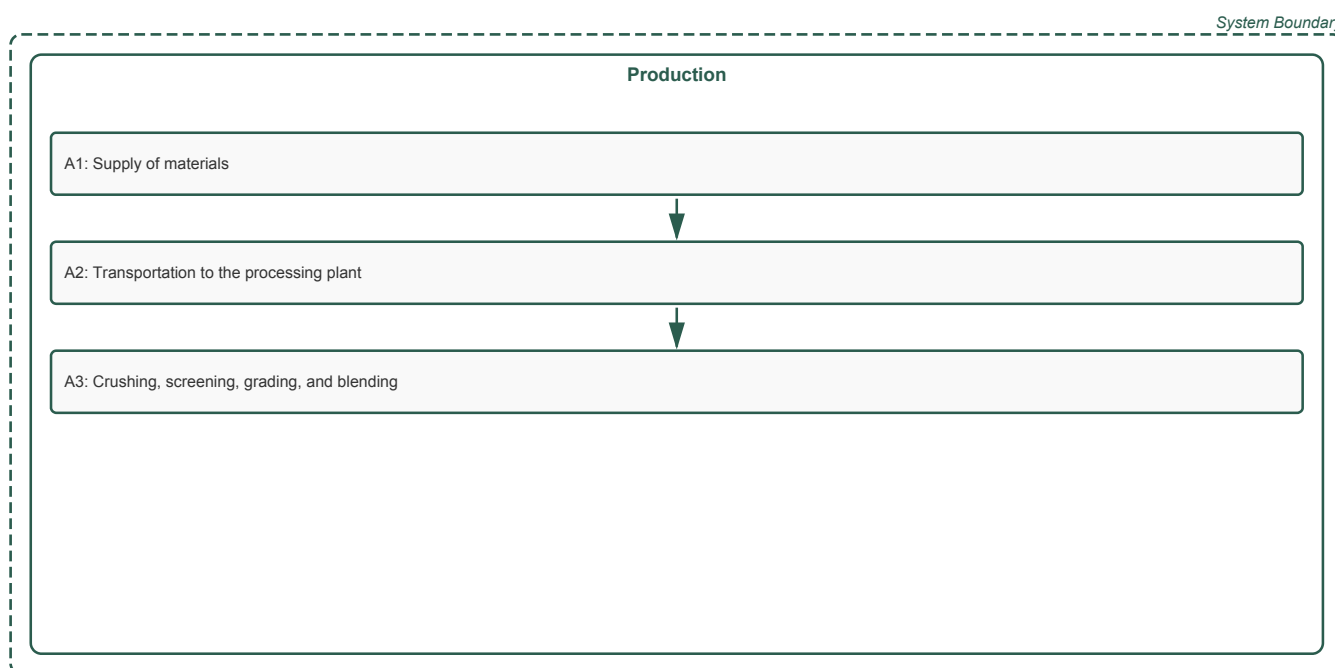
Declared unit

1 t

Reference service life

Not defined

System boundary



Data quality

The foreground data are based on extensive and detailed data collection at the production site of the manufacturer, covering key processes such as raw material sourcing, formulation, and manufacturing. These foreground data are fully linked with corresponding datasets from the background database (ecoinvent 3.10) or with EN15804+A2-compliant EPDs, ensuring consistency, reliability, and maintaining alignment with the latest industry standards.

The following EN15804+A2-compliant EPDs are used as datasets in this EPD:

Element	Year
Aggregates	2025

The overall data representativeness is rated as very good with an overall score of 5.00/5, in accordance with EN 15804+A2 Annex E guidance on data quality assessment, considering geographical, technical, and temporal representativeness.

System boundaries (X=included, MND=module not declared)

	Production			Installation		Use stage							End-of-Life				Next product system
	Raw material supply	Transport	Manufacturing	Transport	Installation Process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational Energy Use	Operational Water Use	Demolition	Transport	Waste Processing	Disposal	Benefits and loads beyond the system boundary
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	x	x	x	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND		MND
Geography			GB	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND		MND

For the geographies modeled in A1 and A2, refer to *Product specification*.

Type of EPD: Cradle to gate

Stage of Material Production and Construction

Module A1: Supply of materials

Module A2: Transportation to the processing plant

Module A3: Crushing, screening, grading, and blending

Cut-off criteria

No cut-offs were applied.

Allocation

Foreground inventory data (energy and fuels, ancillary materials, emissions and waste) was collected at the production-process level. Using the total output of the production process in 2024, these flows are allocated to the reference product based on mass.

LCA: Results

The following results are based on the market-based electricity approach applied to the foreground system (A3). Further details on electricity data are provided in the Additional Requirements section.

Core environmental impact indicators

Indicator	Unit	A1-A3
GWP-total	kg CO ₂ -eq.	8.86e+00
GWP-fossil	kg CO ₂ -eq.	8.86e+00
GWP-biogenic	kg CO ₂ -eq.	1.56e-03
GWP-luluc	kg CO ₂ -eq.	2.03e-03
ODP	kg CFC-11-Eq	1.80e-07
AP	mol H ⁺ -Eq	1.28e-01
EP-freshwater	kg P-Eq	5.50e-04
EP-marine	kg N-Eq	4.26e-02
EP-terrestrial	mol N-Eq	6.13e-01
POCP	kg NMVOC-Eq	1.38e-01
ADPE	kg Sb-Eq	3.48e-05
ADPF	MJ, net calorific value	1.25e+02
WDP	m ³ world Eq deprived	7.82e-01

GWP-total: Global Warming Potential - total **GWP-fossil:** Global warming potential - fossil **GWP-biogenic:** Global Warming Potential - biogenic **GWP-luluc:** Global Warming Potential - luluc **ODP:** Depletion potential of the stratospheric ozone layer **AP:** Acidification potential, Accumulated Exceedance **EP-freshwater:** Eutrophication potential - freshwater **EP-marine:** Eutrophication potential - marine **EP-terrestrial:** Eutrophication potential - terrestrial **POCP:** Photochemical Ozone Creation Potential **ADPE:** Abiotic depletion potential - non-fossil resources **ADPF:** Abiotic depletion potential - fossil resources **WDP:** Water (user) deprivation potential

Additional indicators

Indicator	Unit	A1-A3
PM	disease incidence	1.64e-06
IRP	kBq U235-Eq	4.88e-01
ETP-fw	CTUe	7.95e+01
HTP-c	CTUh	3.13e-08
HTP-nc	CTUh	5.09e-08
SQP	dimensionless	1.84e+01

PM: Potential incidence of disease due to PM emissions **IRP:** Potential Human exposure efficiency relative to U235 **ETP-fw:** Potential Comparative Toxic Unit for ecosystems **HTP-c:** Potential Comparative Toxic Unit for humans - cancer effects **HTP-nc:** Potential Comparative Toxic Unit for humans - non-cancer effects **SQP:** Potential Soil quality index

IRP: This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

ETP-fw, HTP-c, HTP-nc and SQP: The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experienced with these indicators.

Use of resources

Indicator	Unit	A1-A3
PERE	MJ	3.62e+01
PERM	MJ	0.00e+00
PERT	MJ	3.62e+01
PENRE	MJ	1.25e+02
PENRM	MJ	0.00e+00
PENRT	MJ	1.25e+02
SM	kg	0.00e+00
RSF	MJ	0.00e+00
NRSF	MJ	0.00e+00
FW	m ³	2.31e-02

PERE: Primary energy resources - renewable: use as energy carrier
PERM: Primary energy resources - renewable: used as raw materials
PERT: Primary energy resources - renewable: total
PENRE: Primary energy resources - non-renewable: use as energy carrier
PENRM: Primary energy resources - non-renewable: used as raw materials
PENRT: Primary energy resources - non-renewable: total
SM: Use of secondary material
RSF: Renewable secondary fuels
NRSF: Non-renewable secondary fuels
FW: Net use of fresh water

Waste flows

Indicator	Unit	A1-A3
HWD	kg	0.00e+00
NHWD	kg	0.00e+00
RWD	kg	0.00e+00

HWD: Hazardous waste disposed
NHWD: Non hazardous waste disposed
RWD: Radioactive waste disposed

Output flows

Indicator	Unit	A1-A3
CRU	kg	0.00e+00
MFR	kg	0.00e+00
MER	kg	0.00e+00
EEE	MJ	0.00e+00
EET	MJ	0.00e+00

CRU: Components for re-use
MFR: Materials for recycling
MER: Materials for energy recovery
EEE: Exported electrical energy
EET: Exported thermal energy

Name	Value	Unit
Biogenic carbon content in product	0.00e+00	kg C
Biogenic carbon content in accompanying packaging	0.00e+00	kg C

Additional requirements

Greenhouse gas emissions from the use of electricity in the manufacturing phase

Electricity consumption in the manufacturing phase is composed from the sources below. This EPD follows the market-based approach.

Electricity	Quantity [kWh]	Emission Factor [kg CO ₂ e/kWh]
electricity production, photovoltaic, 570kWp open ground installation, multi-Si (GB)	0.45	0.08
electricity production, wind, >3MW turbine, onshore (GB)	8.49	0.02

Dangerous substances

The product contains no hazardous substances given by the REACH Candidate List or the Norwegian Priority List.

Additional environmental information

Additional environmental impact indicators required in NPCR Part A for construction products

Indicator	Unit	A1-A3
GWP-IOBC	kg CO ₂ -eq.	ND

GWP-IOBC: Global Warming Potential - Instantaneous oxidation of biogenic carbon

Bibliography

CEN/TR 15941:2010	Sustainability of construction works - Environmental product declarations - Methodology for selection and use of generic data
EN 15804:2012+A2:2019	Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
EN 15942:2022-04	Sustainability of construction works - Environmental product declarations - Communication format business-to-business
ISO 14025:2011-10	Environmental labels and declarations - Type III environmental declarations - Principles and procedures
ISO 14040:2021-02	Environmental management - Life cycle assessment - Principles and framework
ISO 14044:2021-02	Environmental management - Life cycle assessment - Requirements and guidelines
EF 3.1	Environmental Footprint (EF) Life Cycle Impact Assessment method - Characterisation Factors version 3.1, European Commission, Joint Research Centre (JRC)
ecoinvent 3.10	ecoinvent, Zurich, Switzerland, database version 3.10
NPCR Part A:2021	Construction products and services, Version 2.0. Issue date: 24.03.2021; validity extended to 24.03.2026.
NPCR 018:2022	Product category rules, Part B: Natural stone products, aggregates and fillers. Issue date: 20.01.2022; validity extended to 31.12.2026.

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