Environmental Product Declaration

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

Gypsol Complete

from

LKAB Minerals Ltd

Programme:	The International EPD® System, www.environdec.com
Programme operator:	EPD International AB
EPD registration number:	S-P-07825
Publication date:	2022-12-07
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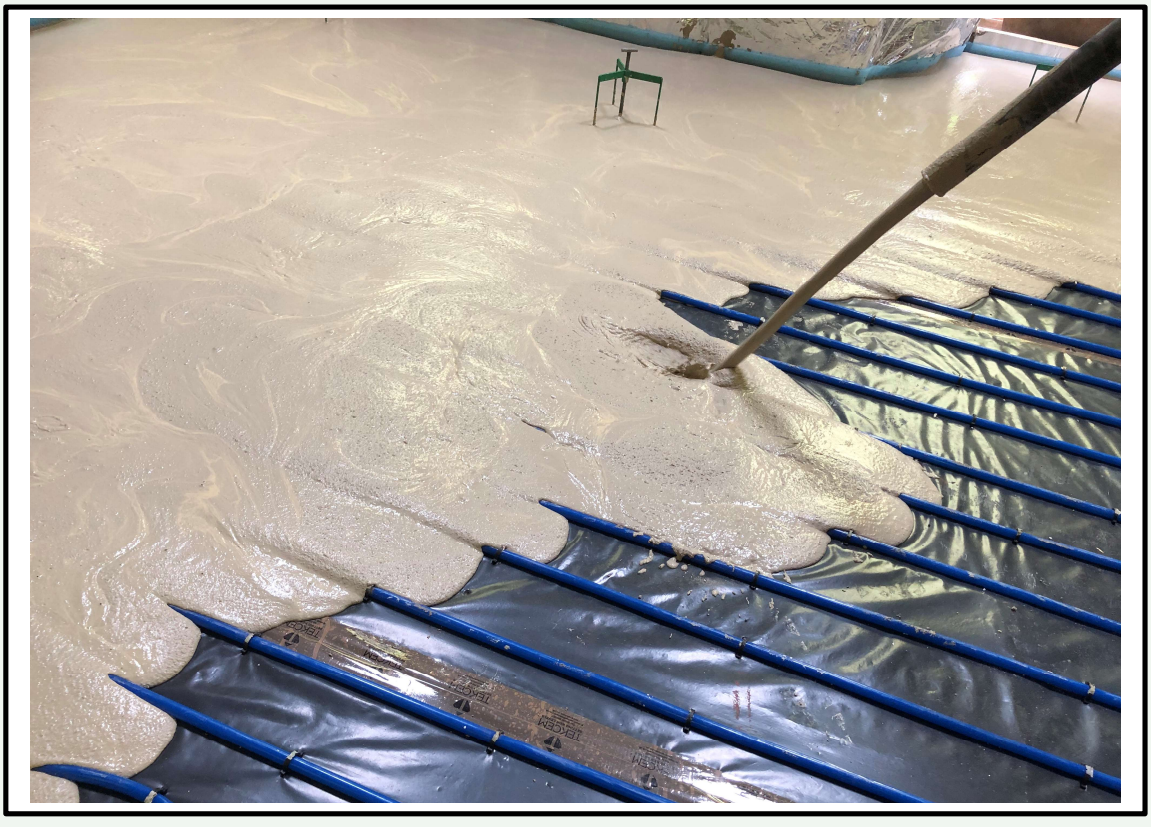
An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com



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

Accountabilities for PCR, LCA and independent, third-party verification
Product Category Rules (PCR)
CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR): *PCR 2019:14 v1.11. UN CPC code: 152*
PCR review was conducted by: *IVL Swedish Environmental Research Institute*
Life Cycle Assessment (LCA)
LCA accountability: Sweco Sverige AB
Third-party verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: ☒ EPD verification by individual verifier Third-party verifier: *David Althoff Palm, Ramboll Sweden AB* Approved by: The International EPD® System
Procedure for follow-up of data during EPD validity involves third party verifier: ☒ Yes ☐ 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: LKAB Minerals Ltd, Raynesway, Derby, DE21 7BE
Contact: Courtney.Jones@lkab.com
Description of the organisation: LKAB Minerals is part of LKAB, an international and high-tech mining and minerals group. LKAB is owned by the Swedish state and was founded in 1890 to mine and upgrade the unique iron ore of Northern Sweden for the global steel market. Today we are also a growing industrial mineral supplier, and other group businesses include drilling systems, rail transport rockwork services and property management. LKAB employs about 4,300 people in 12 countries.

Product-related or management system-related certifications: LKAB Minerals Ltd Runcorn are certified according to the standards for Quality, Environment and Working Environment (ISO 9001, ISO 14001 and ISO 45001). Products are certified according to standard EN 13454 Binders, composite binders and factory-made mixtures for floor screeds based on calcium sulfate.

Name and location of production site(s): LKAB Minerals Ltd, Runcorn Site, Percival Ln, Runcorn WA7 4UY. Situated in the Northwest of England.

Product information

Product name: Gypsol Binder CAB30 (EN 13454) & Gypsol Complete Binder CAB30 (EN 13454)
Product description: Gypsol and Gypsol Complete binders are the key component in all BBA Approved Gypsol floor screeds. It is a combination of carefully milled synthetic anhydrite with special admixtures to produce a powder that when further combined with fine aggregate and water produces a pumpable self-levelling floor screed as a surface. The material is bought in powder form, mainly by ready-mixed concrete suppliers, who use their existing equipment to mix it with fine aggregate and water and supply the final screed.

Gypsol and Gypsol Complete are designed to achieve different installation characteristics through proprietary recipes but maintain similar environmental performance. They contain over 95% synthetic anhydrite, an industrial by-product.

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

Geographical scope: Europe

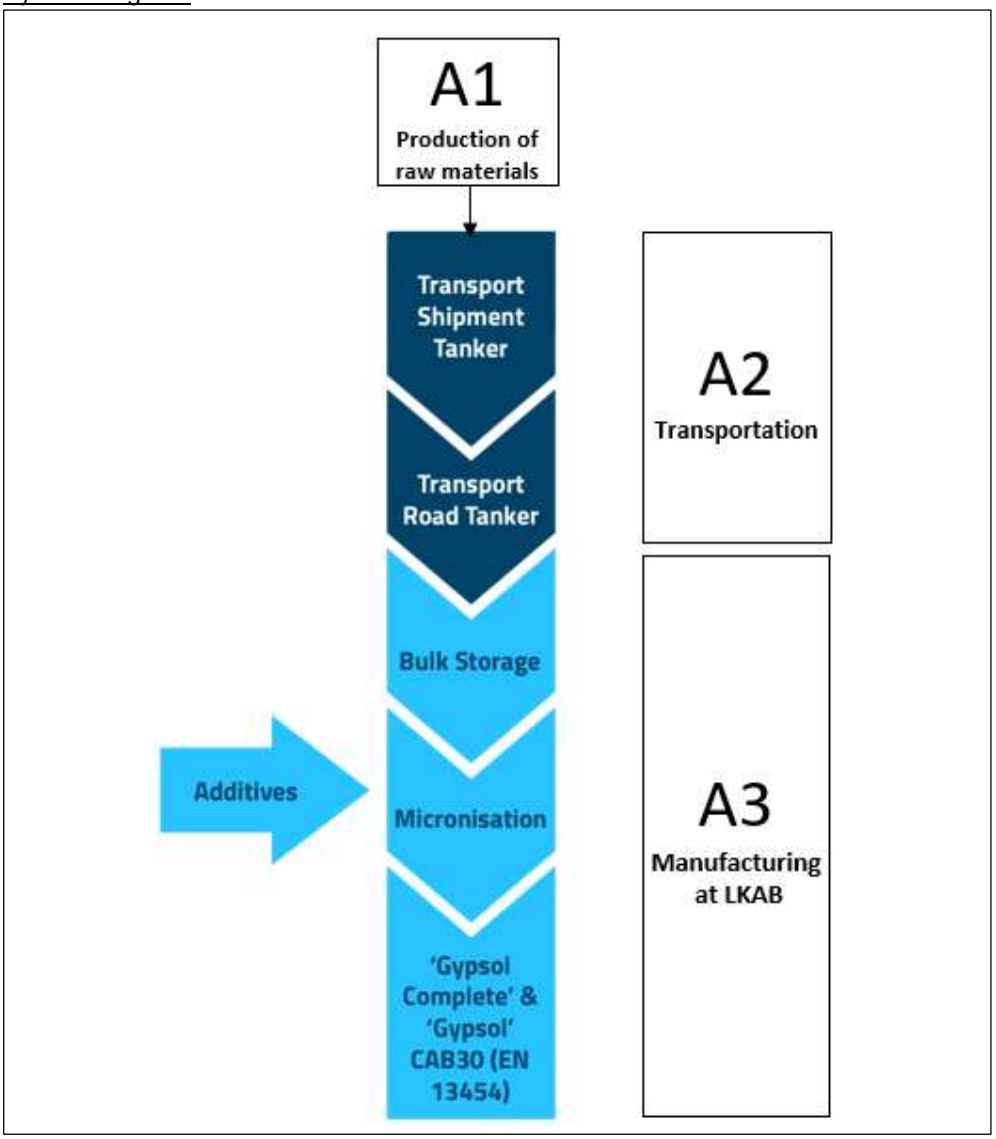
LCA information

Functional unit / declared unit: The declared unit is 1 kg of binder.
Reference service life: Not applicable
Time representativeness: Specific processes were assessed with average data for one year of production (for 2021).
Database(s) and LCA software used: LCA software used is SimaPro 9.3. The database used for modelling is Ecoinvent 3.8
Description of system boundaries: Cradle to gate (A1–A3). This scope is possible due to the following conditions being valid according to the PCR:

- The product or material is physically integrated with other products during installation so they cannot be physically separated from them at end of life,

- the product or material is no longer identifiable at end of life as a result of a physical or chemical transformation process, and
- the product or material does not contain biogenic carbon.

System diagram:



Information on allocation: Allocation has been avoided by subdivision of multi-input/output processes. Although several product groups are produced at the Runcorn site, data representative to the Gypsol products has been gathered. Furthermore, since both products share the same processes, no allocation was needed between Gypsol and Gypsol Complete.

More information: More information about LKAB Minerals, Products and Applications can be found at website http://www.lkabminerals.com/.

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
Geography	Europe			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Specific data used	67%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	12%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	Not relevant.			-	-	-	-	-	-	-	-	-	-	-	-	-	-

Content information

Product components - Gypsol Binder CAB30	Weight, %	Renewable material, weight-%
Anhydrite	98,7%	0%
Admixtures	1,3%	0%
TOTAL	100%	0%
Product components - Gypsol Binder Complete CAB30	**Weight, %**	**Renewable material, weight-%**
Anhydrite	97,3%	0%
Admixtures	2,7%	0%
TOTAL	100%	0%

No dangerous substances from the candidate list of SVHC for Authorisation are relevant for the products. No packaging is used for the products.

Environmental Information

Potential environmental impact – mandatory indicators according to EN 15804

Gypsol Binder Complete CAB30

Results per declared unit																			
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot.A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-fossil	kg CO_2 eq.	7,07E-02	3,36E-02	1,21E-02	1,06E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GWP-biogenic	kg CO_2 eq.	5,96E-04	1,58E-05	1,66E-03	1,71E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GWP-luluc	kg CO_2 eq.	2,06E-05	2,31E-05	1,02E-06	4,39E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GWP-total	kg CO_2 eq.	7,14E-02	3,36E-02	1,37E-02	1,08E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ODP	kg CFC 11 eq.	1,35E-08	6,85E-09	1,31E-09	2,06E-08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AP	mol H^+ eq.	4,74E-04	9,79E-04	5,35E-05	1,46E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EP-freshwater	kg P eq.	1,11E-05	1,22E-06	2,55E-06	1,24E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EP-marine	kg N eq.	6,80E-05	2,41E-04	1,18E-05	3,14E-04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EP-terrestrial	mol N eq.	7,01E-04	2,67E-03	1,13E-04	3,42E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
POCP	kg NMVOC eq.	2,05E-04	6,51E-04	2,89E-05	8,67E-04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ADP-minerals&metals*	kg Sb eq.	4,76E-07	4,99E-08	5,67E-09	5,27E-07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ADP-fossil*	MJ	1,05E+00	4,43E-01	2,81E-01	1,51E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WDP*	m^3	1,58E-02	8,02E-04	4,28E-03	2,07E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption																		

** 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.*

Gypsol Binder CAB30

Results per declared unit

Indicator	Unit	A1	A2	A3	Tot.A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-fossil	kg CO_2 eq.	5,66E-02	3,19E-02	1,21E-02	9,00E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GWP-biogenic	kg CO_2 eq.	5,94E-04	1,11E-05	1,66E-03	1,70E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GWP-luluc	kg CO_2 eq.	2,11E-05	2,27E-05	1,02E-06	4,39E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GWP-total	kg CO_2 eq.	5,72E-02	3,20E-02	1,37E-02	9,17E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ODP	kg CFC 11 eq.	1,13E-08	6,43E-09	1,31E-09	1,79E-08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AP	mol H^+ eq.	3,82E-04	9,84E-04	5,35E-05	1,38E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EP-freshwater	kg P eq.	9,60E-06	1,10E-06	2,55E-06	1,08E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EP-marine	kg N eq.	6,85E-05	2,42E-04	1,18E-05	3,16E-04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EP-terrestrial	mol N eq.	7,16E-04	2,69E-03	1,13E-04	3,45E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
POCP	kg NMVOC eq.	1,96E-04	6,55E-04	2,89E-05	8,62E-04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ADP-minerals&metals*	kg Sb eq.	5,06E-07	4,56E-08	5,67E-09	5,53E-07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ADP-fossil*	MJ	9,84E-01	4,15E-01	2,81E-01	1,41E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WDP	m^3	1,65E-02	7,01E-04	4,28E-03	2,13E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption																		

Potential environmental impact – additional mandatory and voluntary indicators

Gypsol Binder Complete CAB30

Results per declared unit																			
Indicator	Unit	A1	A2	A3	Tot.A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG[1]	kg CO_2 eq.	7,08E-02	3,36E-02	1,21E-02	1,06E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Gypsol Binder CAB30

Results per declared unit																			
Indicator	Unit	A1	A2	A3	Tot.A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG[2]	kg CO_2 eq.	5,66E-02	3,20E-02	1,21E-02	9,17E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Use of resources

Gypsol Binder Complete CAB30

Results per declared unit																			
Indicator	Unit	A1	A2	A3	Tot.A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	6,42E-02	3,36E-03	9,54 E-03	6,38 E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PERM	MJ	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PERT	MJ	6,42E-02	3,36E-03	9,54 E-03	6,38 E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PENRE	MJ	1,13E +00	4,70E-01	2,98 E-01	2,06 E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PENRM	MJ.	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PENRT	MJ	1,13E +00	4,70E-01	2,98 E-01	2,06 E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SM	kg	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RSF	MJ	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NRSF	MJ	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FW	m^3	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

[1] The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus almost equal to the GWP indicator originally defined in EN 15804:2012+A1:2013.

[2] The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus almost equal to the GWP indicator originally defined in EN 15804:2012+A1:2013.

Acronyms	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

Gypsol Binder CAB30

Results per declared unit																			
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot.A 1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	MJ	6,18E-02	2,98 E-03	9,54 E-03	6,08 E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PERM	MJ	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PERT	MJ	6,18E-02	2,98 E-03	9,54 E-03	6,08 E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PENRE	MJ	1,04E +00	4,40 E-01	2,98 E-01	1,94 E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PENRM	MJ.	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PENRT	MJ	1,04E +00	4,40 E-01	2,98 E-01	1,94 E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SM	kg	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RSF	MJ	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NRSF	MJ	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FW	m^3	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acronyms	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water																		

Waste production and output flows

Waste production

Gypsol Binder Complete CAB30

Results per declared unit																			
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot.A 1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Hazardous waste disposed	kg	5,78 E-06	5,05 E-07	1,52 E-07	6,42 E-06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Non-hazardous waste disposed	kg	3,73 E-02	6,75 E-03	9,49 E-04	4,41 E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Radioactive waste disposed	kg	9,99 E-06	3,06 E-06	2,01 E-06	1,61 E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Gypsol Binder CAB30

Results per declared unit																			
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot.A 1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Hazardous waste disposed	kg	6,83 E-07	4,31 E-07	1,52 E-07	1,25 E-06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Non-hazardous waste disposed	kg	4,09 E-02	3,74 E-03	9,49 E-04	4,48 E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Radioactive waste disposed	kg	8,65 E-06	2,88 E-06	2,01 E-06	1,46 E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Output flows

Gypsol Binder Complete CAB30

Results per declared unit																			
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot. A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Components for re-use	kg	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Material for recycling	kg	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Materials for energy recovery	kg	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Exported energy, electricity	MJ	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Exported energy, thermal	MJ	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Gypsol Binder CAB30

Results per declared unit

Indicator	Unit	A1	A2	A3	Tot. A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Material for recycling	kg	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Materials for energy recovery	kg	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Exported energy, electricity	MJ	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Exported energy, thermal	MJ	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Information on biogenic carbon content

Results per declared unit		
BIOGENIC CARBON CONTENT	**Unit**	**QUANTITY**
Biogenic carbon content in product	kg C	0
Biogenic carbon content in packaging	kg C	0

Additional information

There are two categories of screed commonly used in the UK. Traditional sand:cement screeds which are not pumpable, and pumpable self-smoothing screeds (commonly referred to as self-levelling or liquid screeds). In the UK pumpable self-levelling screeds can be further subdivided into those based on CEM I (cement) such as CemSol from LKAB Minerals, and those based on calcium sulfate such as Gypsol from LKAB Minerals (also known as gypsum and anhydrite screeds).

Gypsol calcium sulphate binders can be combined in a variety of formulations to achieve different physical and performance characteristics to suit individual end applications. All can be used in floor systems which offer improved environmental performance, including lower CO2 emissions, than equivalent performance cement-based screeds. Pumpable self-levelling screeds also offer benefits of quick installation and are particularly effective in combination with underfloor heating systems where the screed can improve the coefficient of performance of the system.

Gypsol binders are produced at ambient manufacturing temperatures and screeds produced with them do not require CEM I. It is important to include all the ingredients of the screed when comparing performance, not just the binder component as some screeds require an addition of CEM I.

LKAB and LKAB Minerals sustainability work is reported in the Annual and Sustainability report. Sustainability reports has been issued since 2008.
Reports are available at www.lkab.com.

Sustainability is at the core of our business and our ambition is to create prosperity by being one of the most innovative, resource efficient and responsible mining and minerals companies in the world.

Release of dangerous substances to indoor air, soil and water during use stage
No release of dangerous substances to indoor air or soil and water from the Gypsol products are relevant.

References

General Programme Instructions of the International EPD® System. Version 3.01.
PCR 2019:14. Construction products. Version 1.11

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

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