Appendix G Grading curve of backfill material

As in phase 1 of the PEPOPERM-project all work was based on material that is produced during excavation by a roadheader. The crushed salt generated that way shows largely a grain size of less than 64 mm. For the reference drift backfill it is thus foreseen that grain fractions larger than 31.5 mm are removed by sieving. This maximum grain size is too large, however, to be used as backfill in the emplacement boreholes as the annulus between canister and borehole wall is expected to be in the order of 8 cm. For this type of material a maximum grain size of 8 mm was defined in /ROT 99/[1] which was again achieved by removing larger grains by sieving and chosen as a basis for investigations in the framework of the REPOPERM-project /KRÖ 09/. A specification of the material used is given in terms of mass fraction of the grain fractions gain from fractional sieving in Tab. 1 being visualized in Fig. 1.

Tab. 1 Characterisation of the grading curve for the investigated backfill material

Grain fraction [mm]	Mass fraction [%]
4-8	10,56
2-4	32,3
1-2	23,23
0,5-1	13,69
0,4-0,5	4,46
0,25-0,4	3,77
0,125-0,25	6,32
0,063-0,125	4,01
<0,063	1,65
sum	99,99

[1] informally called „DEBORA-material“

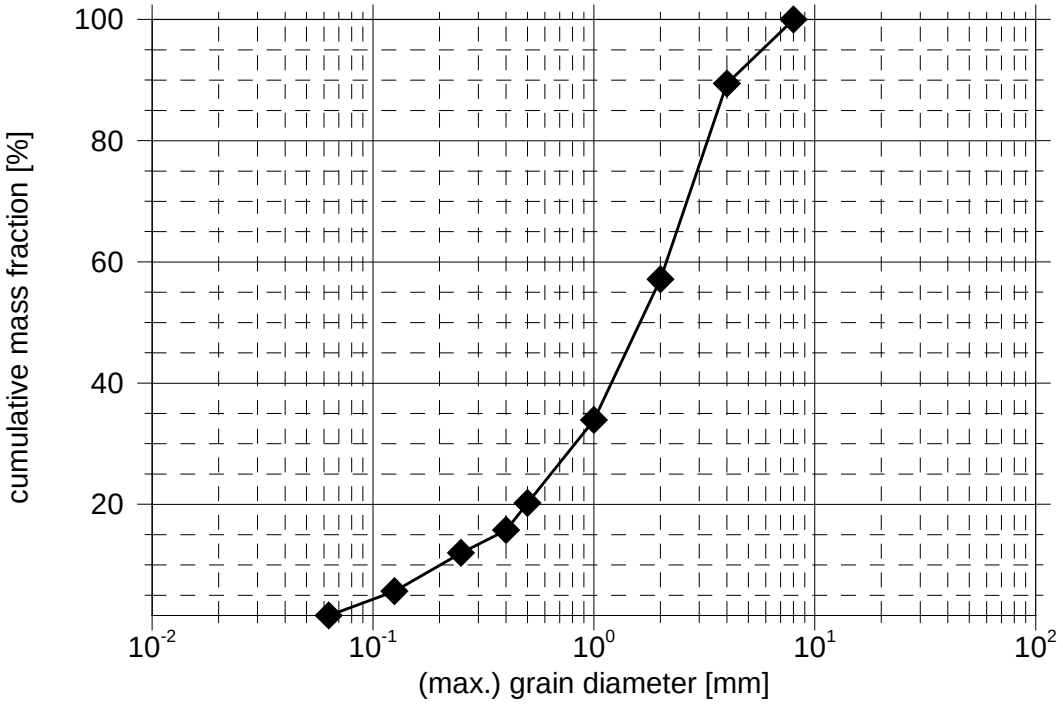

Fig. 1 Korngrößenverteilung des Salzgrusmaterials; modified from /KRÖ 09/