

Giordano et al. 2025 Volcanica_SUPPLEMENTARY MATERIAL SM2 DENSITY DATA

STROMBOLI 3 JULY 2019

DATE: 19/06/2024

24/06/2024

Dens H2O (26°) WEIGH LEAD IN WATER** (g): 1.83

WEIGH LEAD (g): 16.32

0.99681

DRE (kg/m3): 2850

DRE (g/cm3): 2.8500

(*): Referred to water T°C.

(**): Corresponding to the weigh of the water displaced by the immersed object.

(***): Per peso totale s'intende il peso del clasto inglobato più il peso del piombo, corrispondente al peso del volume d'acqua spostato dal clasto immerso.

(****): Che equivale al volume d'acqua spostato dal clasto immerso (espresso in mL)

| | n° | Dry weigh clast uncoated (g) | Dry weigh clast coated (g) | Total weigh*** clast coated immersed in water (g) | Net weigh immersed in water (g) | Clast Volume (cm³) **** | Clast Density (g/cm³) | Clast Density (kg/m³) | Weigh in water | Volume | Density |
|------|--------|---------------------------------------|----------------------------------|---|---------------------------------------|----------------------------|--------------------------|--------------------------|-------------------|--------|---------|
| GIN8 | >16 | 3.55 | 3.87 | 4.41 | 2.58 | 2.59 | 1.49 | 1494.75 | 1.29 | 2.58 | 1.50 |
| | >8 (1) | 0.55 | 0.75 | 3.25 | 1.42 | 1.42 | 0.52 | 524.10 | -0.67 | 1.42 | 0.52 |
| | >8 (2) | 0.40 | 0.51 | 2.66 | 0.83 | 0.83 | 0.61 | 606.49 | -0.33 | 0.83 | 0.61 |
| | >8 (3) | 0.61 | 0.78 | 3.16 | 1.33 | 1.33 | 0.58 | 584.22 | -0.55 | 1.33 | 0.59 |
| | >8 (4) | 0.42 | 0.60 | 2.96 | 1.13 | 1.13 | 0.53 | 525.49 | -0.53 | 1.13 | 0.53 |
| | >8 (5) | 0.48 | 0.69 | 2.83 | 1.00 | 1.00 | 0.69 | 689.19 | -0.31 | 1.00 | 0.69 |
| | >4(1) | 0.13 | 0.21 | 2.15 | 0.32 | 0.32 | 0.67 | 667.24 | -0.11 | 0.32 | 0.67 |
| | >4(2) | 0.16 | 0.22 | 2.18 | 0.35 | 0.35 | 0.63 | 629.13 | -0.13 | 0.35 | 0.63 |
| | >4(3) | 0.25 | 0.31 | 2.15 | 0.32 | 0.32 | 0.97 | 972.20 | -0.01 | 0.32 | 0.98 |
| | >4(4) | 0.10 | 0.16 | 2.09 | 0.26 | 0.26 | 0.60 | 603.07 | -0.10 | 0.26 | 0.60 |
| | >4(5) | 0.24 | 0.31 | 2.10 | 0.27 | 0.27 | 1.14 | 1141.53 | 0.04 | 0.27 | 1.15 |
| | >2(1) | 0.02 | 0.04 | 1.88 | 0.05 | 0.05 | 0.74 | 737.64 | -0.01 | 0.05 | 0.74 |
| | >2(2) | 0.04 | 0.07 | 1.91 | 0.08 | 0.08 | 0.85 | 854.76 | -0.01 | 0.08 | 0.86 |
| | >2(3) | 0.02 | 0.04 | 1.88 | 0.05 | 0.05 | 0.82 | 817.38 | -0.01 | 0.05 | 0.82 |
| | >2(4) | 0.06 | 0.07 | 1.87 | 0.04 | 0.04 | 1.83 | 1826.65 | 0.03 | 0.04 | 1.84 |
| | >2(5) | 0.03 | 0.04 | 1.86 | 0.03 | 0.03 | 1.26 | 1262.63 | 0.01 | 0.03 | 1.27 |
| | >2(6) | 0.03 | 0.05 | 1.90 | 0.07 | 0.07 | 0.74 | 737.64 | -0.02 | 0.07 | 0.74 |
| GIN1 | >16(1) | 1.53 | 1.99 | 5.47 | 3.64 | 3.65 | 0.54 | 544.47 | -1.65 | 3.65 | 0.55 |
| | >16(2) | 0.99 | 1.34 | 4.55 | 2.72 | 2.73 | 0.49 | 490.20 | -1.38 | 2.72 | 0.49 |
| | >16(3) | 1.24 | 1.76 | 5.98 | 4.15 | 4.16 | 0.42 | 422.02 | -2.39 | 4.16 | 0.42 |
| | >16(4) | 1.02 | 1.37 | 4.07 | 2.24 | 2.25 | 0.61 | 609.61 | -0.87 | 2.24 | 0.61 |
| | >16(5) | 0.75 | 0.99 | 3.50 | 1.67 | 1.68 | 0.59 | 593.13 | -0.68 | 1.67 | 0.59 |
| | >8(1) | 0.99 | 1.29 | 4.06 | 2.23 | 2.24 | 0.57 | 574.40 | -0.95 | 2.23 | 0.58 |
| | >8(2) | 0.73 | 0.97 | 3.14 | 1.31 | 1.31 | 0.74 | 735.89 | -0.34 | 1.31 | 0.74 |
| | >8(3) | 0.21 | 0.36 | 2.73 | 0.90 | 0.90 | 0.40 | 403.15 | -0.54 | 0.90 | 0.40 |
| | >8(4) | 0.45 | 0.66 | 3.04 | 1.21 | 1.21 | 0.54 | 543.39 | -0.55 | 1.21 | 0.54 |
| | >8(5) | 0.25 | 0.34 | 2.39 | 0.56 | 0.56 | 0.61 | 606.10 | -0.22 | 0.56 | 0.61 |
| | >4(1) | 0.17 | 0.22 | 2.09 | 0.26 | 0.26 | 0.86 | 855.34 | -0.04 | 0.26 | 0.86 |
| | >4(2) | 0.28 | 0.34 | 2.18 | 0.35 | 0.35 | 0.97 | 972.03 | -0.01 | 0.35 | 0.98 |
| | >4(3) | 0.23 | 0.29 | 2.09 | 0.26 | 0.26 | 1.11 | 1109.53 | 0.03 | 0.26 | 1.11 |
| | >4(4) | 0.12 | 0.16 | 1.99 | 0.16 | 0.16 | 0.99 | 986.22 | 0.00 | 0.16 | 0.99 |
| | >4(5) | 0.19 | 0.26 | 2.06 | 0.23 | 0.23 | 1.12 | 1122.93 | 0.03 | 0.23 | 1.13 |
| | >2(1) | 0.03 | 0.06 | 1.88 | 0.05 | 0.05 | 1.18 | 1180.22 | 0.01 | 0.05 | 1.18 |
| | >2(2) | 0.01 | 0.03 | 1.85 | 0.02 | 0.02 | 1.31 | 1305.82 | 0.01 | 0.02 | 1.31 |
| | >2(3) | 0.03 | 0.06 | 1.88 | 0.05 | 0.05 | 1.14 | 1138.36 | 0.01 | 0.05 | 1.14 |
| | >2(4) | 0.02 | 0.05 | 1.87 | 0.04 | 0.04 | 1.13 | 1128.89 | 0.01 | 0.04 | 1.13 |
| | >2(5) | 0.02 | 0.05 | 1.90 | 0.07 | 0.07 | 0.67 | 672.13 | -0.02 | 0.07 | 0.67 |
| | >2(6) | 0.01 | 0.03 | 1.87 | 0.04 | 0.04 | 0.71 | 710.23 | -0.01 | 0.04 | 0.71 |
| GIN6 | >8(1) | 0.61 | 0.96 | 3.79 | 1.96 | 1.97 | 0.49 | 485.89 | -1.00 | 1.96 | 0.49 |
| | >8(2) | 0.62 | 0.77 | 3.26 | 1.43 | 1.43 | 0.54 | 536.53 | -0.66 | 1.43 | 0.54 |
| | >8(3) | 1.40 | 1.57 | 3.26 | 1.43 | 1.43 | 1.09 | 1091.54 | 0.14 | 1.43 | 1.10 |
| | >8(4) | 1.17 | 1.33 | 3.39 | 1.56 | 1.56 | 0.85 | 848.06 | -0.23 | 1.56 | 0.85 |
| | >8(5) | 0.26 | 0.36 | 2.69 | 0.86 | 0.86 | 0.42 | 422.25 | -0.50 | 0.86 | 0.42 |
| | >4(1) | 0.27 | 0.33 | 2.20 | 0.37 | 0.37 | 0.90 | 899.01 | -0.04 | 0.37 | 0.90 |
| | >4(2) | 0.10 | 0.17 | 2.16 | 0.33 | 0.33 | 0.51 | 505.05 | -0.16 | 0.33 | 0.51 |
| | >4(3) | 0.18 | 0.23 | 2.11 | 0.28 | 0.28 | 0.83 | 830.91 | -0.05 | 0.28 | 0.83 |
| | >4(4) | 0.16 | 0.20 | 2.12 | 0.29 | 0.29 | 0.68 | 678.86 | -0.09 | 0.29 | 0.68 |
| | >4(5) | 0.15 | 0.22 | 2.16 | 0.33 | 0.33 | 0.65 | 653.67 | -0.11 | 0.33 | 0.66 |
| | >2(1) | 0.02 | 0.03 | 1.89 | 0.06 | 0.06 | 0.57 | 568.18 | -0.03 | 0.06 | 0.57 |
| | >2(2) | 0.03 | 0.06 | 1.90 | 0.07 | 0.07 | 0.82 | 824.50 | -0.01 | 0.07 | 0.83 |
| | >2(3) | 0.03 | 0.05 | 1.88 | 0.05 | 0.05 | 0.92 | 921.05 | 0.00 | 0.05 | 0.92 |
| | >2(4) | 0.01 | 0.02 | 1.87 | 0.04 | 0.04 | 0.61 | 613.04 | -0.02 | 0.04 | 0.61 |
| | >2(5) | 0.02 | 0.05 | 1.89 | 0.06 | 0.06 | 0.79 | 792.46 | -0.01 | 0.06 | 0.79 |
| | >2(6) | 0.03 | 0.04 | 1.88 | 0.05 | 0.05 | 0.83 | 825.36 | -0.01 | 0.05 | 0.83 |
| POM | (1) | 1.45 | 1.75 | 4.69 | 2.86 | 2.87 | 0.61 | 610.74 | -1.11 | 2.86 | 0.61 |
| | (2) | 0.65 | 0.86 | 3.32 | 1.49 | 1.49 | 0.58 | 578.48 | -0.63 | 1.49 | 0.58 |
| | (3) | 0.61 | 0.76 | 3.27 | 1.44 | 1.44 | 0.53 | 529.35 | -0.68 | 1.44 | 0.53 |
| | (4) | 0.70 | 0.90 | 3.27 | 1.44 | 1.44 | 0.62 | 620.03 | -0.54 | 1.44 | 0.62 |
| | (5) | 0.57 | 0.76 | 3.16 | 1.33 | 1.33 | 0.57 | 566.46 | -0.57 | 1.33 | 0.57 |