This DATASETreadme file was generated on 2021-07-02 by Stefan Karlsson

GENERAL INFORMATION

1. Title of Dataset: *The viscosity effect of TiO_2 on soda-lime-silicate bearing glass*

2. Author Information

A. Principal Investigator Contact Information
Name: Stefan Karlsson
Institution: RISE Research Institutes of Sweden
Address: RISE Glass, Vejdes plats 3, SE-352 52 Växjö, Sweden
Email: stefan.karlsson@ri.se

3. Date of data collection: 2019-01-01 to 2019-10-01

4. Geographic location of data collection: Växjö (Sweden)

5. Information about funding sources that supported the collection of the data: FORMAS, the Swedish Research Council for Sustainable Development, Grant No. 2018-00707.

SHARING/ACCESS INFORMATION

2. Links to publications that cite or use the data:
Karlsson, S. *The viscosity effect of TiO_2 on soda-lime-silicate bearing glass*. in *4th Internation Workshop on Glass and Entropy and 9th International Otto Schott Colloquium*. 2019. DOI: 10.13140/RG.2.2.11869.15843.

3. Links to other publicly accessible locations of the data: N/A

4. Links/relationships to ancillary data sets: N/A

5. Was data derived from another source? No

6. Recommended citation for this dataset:
Karlsson, S. Dataset: *The viscosity effect of TiO_2 on soda-lime-silicate bearing glass*. 2021.
https://doi.org/10.5878/0gv4-dr76

DATA & FILE OVERVIEW

1. File List:

Viscosity: Ti11.txt, Ti22.txt, Ti23.txt, Ti24.txt, Ti25.txt, Ti26.txt, Ti27.txt, Ti33.txt, Ti34.txt, Ti35.txt and Ti37.txt
Viscosity fitting: Visc_parameter_determination_Angell_Rao.m

2. Relationship between files, if important: N/A

3. Additional related data collected that was not included in the current data package: Given in Karlsson, S. *The viscosity effect of TiO_2 on soda-lime-silicate bearing glass*. in *4th Internation Workshop on Glass and Entropy and 9th International Otto Schott Colloquium*. 2019. DOI: 10.13140/RG.2.2.11869.15843.

4. Are there multiple versions of the dataset? No

METHODOLOGICAL INFORMATION

1. Description of methods used for collection/generation of data:
Please find all relevant information in the following scientific paper:
Karlsson, S. *The viscosity effect of TiO_2 on soda-lime-silicate bearing glass*. in *4th Internation Workshop on Glass and Entropy and 9th International Otto Schott Colloquium*. 2019. DOI: 10.13140/RG.2.2.11869.15843.

2. Methods for processing the data:
Please find all relevant information in the following scientific paper:
Karlsson, S. *The viscosity effect of TiO_2 on soda-lime-silicate bearing glass*. in *4th Internation Workshop on Glass and Entropy and 9th International Otto Schott Colloquium*. 2019. DOI: 10.13140/RG.2.2.11869.15843.

3. Instrument- or software-specific information needed to interpret the data:
Viscosity fitting script: Visc_parameter_determination_Angell_Rao.m can be run with Octave version 5.

4. Standards and calibration information, if appropriate:
Please find all relevant information in the following scientific paper:
Karlsson, S. *The viscosity effect of TiO_2 on soda-lime-silicate bearing glass*. in *4th Internation Workshop on Glass and Entropy and 9th International Otto Schott Colloquium*. 2019. DOI: 10.13140/RG.2.2.11869.15843.

5. Environmental/experimental conditions:
Please find all relevant information in the following scientific paper:
Karlsson, S. *The viscosity effect of TiO_2 on soda-lime-silicate bearing glass*. in *4th Internation Workshop on Glass and Entropy and 9th International Otto Schott Colloquium*. 2019. DOI: 10.13140/RG.2.2.11869.15843.

6. Describe any quality-assurance procedures performed on the data:
Please find all relevant information in the following scientific paper:
Karlsson, S. *The viscosity effect of TiO_2 on soda-lime-silicate bearing glass*. in *4th Internation Workshop on Glass and Entropy and 9th International Otto Schott Colloquium*. 2019. DOI: 10.13140/RG.2.2.11869.15843.

7. People involved with sample collection, processing, analysis and/or submission:
A. Stefan Karlsson

DATA-SPECIFIC INFORMATION FOR Viscosity: Ti11.txt, Ti22.txt, Ti23.txt, Ti24.txt, Ti25.txt, Ti26.txt, Ti27.txt, Ti33.txt, Ti34.txt, Ti35.txt and Ti37.txt

1. Number of variables: 8
2. Number of cases/rows: 9-16
3. Variable List:
No = Number of data
Torq = Torque in mNm
Rpm =Revolutions per minute
logEta = $\log_{10} \eta$ in dPa·s
nom C = Nominal temperature in °C
meas C = Measured temperature in °C
fit C = fitted temperature to Vogel-Fulcher-Tammann (VFT) equation in °C
corr C = corrected temperature after calibration in °C
nom/meas_fit SD= standard deviation of fit C in relation to nom C or meas C.
A', B', T0' = VFT parameters before calibration
diffA, diffB, diffT0 = calibration parameters
A, B, T0 = corrected VFT parameters after calibration

4. Missing data codes:
Key code for identifying sample in relation to the publication: N/A

5. Specialized formats or other abbreviations used: N/A