

ProtoREACH

ProtoREACH is a computational (*in silico*) tool specially focused on REACH, a European Union regulation, adopted to improve the protection of human health and the environment from the risks that can be posed by chemicals, while enhancing the competitiveness of the EU chemicals industry.

REACH also promotes alternative methods for the hazard assessment of substances in order to reduce the number of tests on animals. The requirements for registering a chemical substance are organized as annexes of the REACH regulation. Different annexes must be used depending on the substance mass produced or imported by each company.

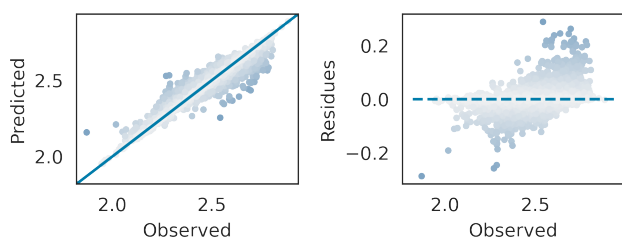
Endpoint

Physical-chemical properties: Melting point.

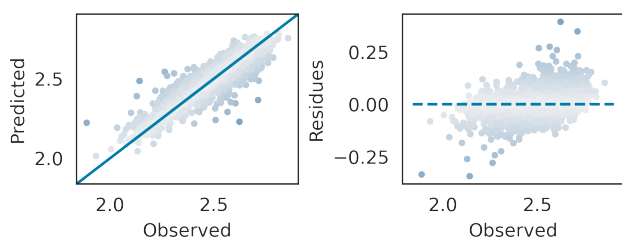
The melting point is the temperature at which a substance changes from a solid to a liquid. The reverse change from a liquid to solid is generally referred to as the freezing point. As for most substances, the melting and freezing points are approximately the same, usually both are simply referred to as 'melting point'.

Metrics

Training set



Validation set



Parameters	Training	Validation
R ² score	0.94	0.83
Mean absolute error (MAE)	0.02	0.04
Mean squared error (MSE)	0.00	0.00
Median absolute error	0.01	0.03
Explained variance	0.94	0.83