# TECHNICAL DATA SHEET



# GEO40<sup>™</sup> SOL-1430Na (FL)

Geo40<sup>™</sup> SOL-1430Na (FL) is a sustainably derived aqueous dispersion of amorphous silicon dioxide nanoparticles. The alkaline dispersion contains small sized colloidal silica particles at 30% SiO<sub>2</sub> concentration in water. The particles have a negatively charged surface (anionic) which is stabilized by sodium hydroxide.

#### **RECOMMENDED APPLICATIONS**

The product can be used in a wide variety of applications, such as:

- Manufacture of fabricated metal products (refractories and investment casting)
- Manufacture of electronic products (precision polishing)
- Textile treatment
- Manufacture of pulp, paper and paper products (drainage aid)
- Coatings and inks
- Catalyst binder
- Antislips and anti-soil treatments
- Other applications where a small particle size colloidal silica is required

#### **CHARACTERISTIC PROPERTIES**

Specification*	Range	Target Value	Unit
Average particle size	11.5 – 15.5	13.5	nm
Solids	29.0 - 32.0	30.5	w/w %
рН	9.2 – 10.0	9.6	рН
Density	1.191 – 1.211	1.201	kg/L
Surface area	176 – 236	201	m²/g
Free Alkalinity (as Na <sub>2</sub> O)	0.20 - 0.50	0.35	w/w %
Viscosity	0.0 - 10.0	5.0	cP
Biocide	-	200	mg/kg

\*Special Customer related specifications can be agreed upon

# TECHNICAL DATA SHEET



### **PACKAGING INFORMATION**

Geo40<sup>™</sup> SOL-1430Na is available in the following packaging amounts:

240kg drum

1200 or 1250kg Intermediate Bulk Container (IBC)

22.3MT shipping container with bladder

### HANDLING & STORAGE

Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling. Avoid breathing aerosols and mists (also dust from dried-down product). Wash contaminated clothing before reuse and before the colloidal silica dries.

Keep container tightly closed. Transportation and storage in closed original container. Store at temperatures above 2°C (35°F) and below 43°C (110°F) to avoid irreversible gel formation or silica precipitation.

Protect from heat and direct sunlight. If storage tanks are located outdoors, choose a shaded location or erect a sunscreen over the containers.

Protect from frost. If freezing temperatures are likely, storage containers should be equipped with steam coils and lagging.

Shelf life (in unopened original packaging): 12 months.

### **HEALTH, SAFETY & ENVIRONMENT**

Full HSE information is available by requesting a SDS from any Geo40 representative or by contacting the Sales department at sales@geo40.com

Not considered dangerous goods nor deemed hazardous material by the transport regulations.

## TO ORDER MATERIAL, OR FIND OUT MORE

Please contact: sales@geo40.com

This Technical Data Sheet has been prepared by Geo40 Limited for information purposes only. While Geo40<sup>TM</sup> has used all reasonable care to ensure that the information is free from error, Geo40<sup>TM</sup> does not warrant its accuracy, adequacy or completeness or that Geo40<sup>TM</sup> SOL-1430Na (FL) will be suitable for your intended use. The only warranties provided are those set out in Geo40<sup>TM</sup> Terms and Conditions of Trade. To the extent permitted by law, all other warranties relating to this information or Geo40<sup>TM</sup> SOL-1430Na (FL) (whether express, implied or statutory) are excluded. GEO40<sup>TM</sup> is a trademark of Geo40 Limited. © 2022 Geo40<sup>TM</sup> Limited.