



# Celite® 545 Diatomaceous Earth

## FILTER AID

### Overview

Celite 545 diatomaceous earth (DE) is widely used in the oil and gas industry as a medium to filter liquids in both onshore and offshore operations. DE is a nonmetallic material composed primarily of silica (silicon dioxide), a hard, inert compound that is insoluble and resistant to solvents, acids, and other chemicals.

Celite 545 DE derives from diatoms, the fossilized remains of aquatic algae deposited on lake beds and ocean floors millions of years ago. Its unique, strong, geometric structure, high pore volume, and low resistance make it an excellent filter medium. The structure and particle-size distribution make it extremely effective when filtering liquids that contain very fine submicron hazes.

DE is also called diatomaceous silica, diatomite, infusorial earth, and kieselguhr. In addition to the predominant silica, it contains trace amounts of oxides of calcium, sodium, magnesium, iron, and potassium.

### Features

- High permeability
- Chemically Inert
- Highly effective particle and size distribution

### Benefits

- High flow rates
- Effective removal of rigid and deformable solids
- Easy handling

### Technical Specifications

Physical Properties	
Color	White / off white
Appearance	Fine powder
Wet Density	20 lbs/cu ft, 0.32 g/cc
pH	10.5 [10% in water]
Moisture	As shipped (<1%)

Packaging Information
25 kg sack

Recommended Treatment
Recommended treatment is dependent upon filtration system, fluid density, anticipated solids loading and other factors. Please contact your TETRA service representative for specific recommendations.

### Safety and Handling

Avoid skin and eye contact, inhalation or ingestion. For skin contact, wash with soap and large quantities of water. For eye contact, flush with large quantities of water. Use properly designed respirator if adequate ventilation is not available. Refer to the Safety Data Sheet for specific details.

Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Seller assumes no obligation or liability for the information in this document. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. Further, nothing contained herein shall be taken as a recommendation to manufacture or use any of the herein described materials or processes in violation of existing or future patents.