



TECHNICAL DATA SHEET (TDS) – DRILLING STARCH

Manufacturer / Supplier: Basekim

Product Name: Drilling Starch (API / Premium Grade)

Application: Fluid Loss Control Additive for Water-Based Drilling Fluids

1. Product Overview

Drilling starch is a high-quality, modified natural polymer used in water-based drilling mud systems to **reduce fluid loss, stabilize boreholes, and improve filter-cake quality**. Basekim supplies API-compliant drilling starch suitable for fresh water, brackish water, and lightly saline muds.

2. Features & Benefits

- Excellent **fluid-loss control** in water-based drilling fluids
- Performs at **low, medium, and moderately high temperatures**
- Provides thin, tough filter cake
- Enhances borehole stability
- Compatible with most WBM additives
- Environmentally friendly, non-toxic, biodegradable

3. Typical Physical & Chemical Properties

Property	Specification
Appearance	Off-white to light cream powder
Odor	Slight / Odorless
Moisture Content	≤ 12%
pH (1% Solution)	8.0 – 11.0
Bulk Density	550 – 750 kg/m ³
Solubility	Dispersible in water
Filtrate Loss Reduction	20% – 60% based on mud formulation
Thermal Stability	Up to 120°C (248°F) depending on grade
Viscosity Impact	Low to moderate



4. Recommended Usage

Application	Dosage
Freshwater drilling fluids	2–8 lb/bbl (5.7–22.8 kg/m ³)
Brackish water mud	4–10 lb/bbl (11.5–28.5 kg/m ³)
High-filtrate-loss systems	8–12 lb/bbl (22.8–34.2 kg/m ³)

Mixing Instructions:

Add slowly through a mud hopper for optimum dispersion.

5. Packaging

- 25 kg multi-wall paper bags
- 25 kg PE bags
- 500–1000 kg jumbo bags
- Customized packaging available upon request

6. Storage & Shelf Life

- Store in a **dry, cool, and well-ventilated area**
- Protect from moisture
- Shelf life: **24 months** in original packaging