



1. DESCRIPTION

Trade Name: DRILLING STARCH HT

Chemical Name: DRILLING STARCH HT- High-Temperature STARCH

Application: Fluid loss controller in drilling fluid

Supplier: TEAM Chemicals

Telephone: +44 (0)207 408 7700 - +98 912 3717539

Address: No. 43, Souri St., 43 Ashrafi Esfahani Expressway

2. COMPOSITION / INFORMATION ON INGREDIENTS

Material	CAS NUMBER	%
Starch	9005-25-8	>99

3. HAZARD IDENTIFICATION

None under normal operating conditions.

Potential Acute Health Effects: -

SWALLOWED

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

EYE

If this product comes in contact with eyes:

- Wash out immediately with water.

SKIN

If skin contact occurs:

- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).

INHALED

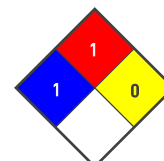
If fumes or combustion products are inhaled remove from contaminated area.



Material Safety Datasheet

DRILLING STARCH HT

Irritant Yes **Flammable** No
Carcinogenic No **Oxidant** No
Explosive No **Environmental Hazard** No
Corrosive No
(Risk-Phrases) For silica: R-20
(Safety-Phrases) S22 & S24



4. FIRST AID MEASURES

Eye Contact:

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- If pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel

Skin Contact:

Brush off the dust.

If skin or hair contact occurs:

- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

Inhalation:

- If dust is inhaled, remove from contaminated area.
- Encourage patient to blow nose to ensure clear passage of breathing.
- If irritation or discomfort persists seek medical attention.

Ingestion:

If swallowed do NOT induce vomiting.

- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Seek medical advice.



5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

For SMALL FIRES: Dry chemical, CO₂, water spray or foam.

For LARGE FIRES: Water-spray, fog or foam.

FIRE FIGHTING

- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.

FIRE/EXPLOSION HAZARD

- Any source of ignition, i.e. friction, heat, sparks or flame, may cause fire or explosion.
- May burn fiercely
- May form explosive mixtures with air.

FIRE INCOMPATIBILITY

Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result.

PERSONAL PROTECTION

Glasses: Chemical goggles.

Gloves: Leather Gloves.

Respirator: Particulate

6. ACCIDENTAL RELEASE MEASURES

Small Spill:

Shovel into dry containers.

Flush the area with water. Be aware of the potential for surfaces to become slippery when wet.

- Move containers from spill area.
- Control personal contact by using protective equipment.

Large Spill:

Shovel into dry containers.

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard. Cover and move the containers. Flush the area with water. Be aware of the potential for surfaces to become slippery when wet.



7. HANDLING AND STORAGE

Handling Precautions: Avoid handling which leads to dust formation. Provide good ventilation. Mechanical ventilation or local exhaust ventilation may be required. Do not use contact lenses.

Storage Precautions: Store in tightly closed original container in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE CONTROLS

PERSONAL PROTECTION

Source	Material	TWA mg/m ³
UK Workplace Exposure Limits (WELs)	starch (Starch - respirable)	4
UK Workplace Exposure Limits (WELs)	starch (Starch - total inhalable)	10

RESPIRATOR

Respiratory protection must be used if air contamination exceeds acceptable level.

EYE

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.

HAND/FEET

Wear safety footwear.

OTHER

- Overalls.
- Barrier cream.

ENGINEERING CONTROLS

Use in a well-ventilated area.

- Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powered by mutual friction.
- Exhaust ventilation should be designed to prevent accumulation and recirculation of particulates in the workplace.
- If in spite of local exhaust an adverse concentration of the substance in air could occur, respiratory protection should be considered. Such protection might consist of:
 - (a): particle dust respirators, if necessary, combined with an absorption cartridge;
 - (b): filter respirators with absorption cartridge or canister of the right type;
 - (c): fresh-air hoods or masks



9. PHYSICAL & CHEMICAL PROPERTIES

Physical state and appearance: Powder

Color: Light tan powder

Odor: Odorless

pH: 6-8 (10% Sol.)

Boiling Point: Not applicable

Melting/Freezing Point: Not applicable

Specific Gravity: 1.5

Solubility (Water): Soluble

10. STABILITY & REACTIVITY

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Avoid reaction with oxidizing agents.

Materials to Avoid: Avoid reaction with oxidizing agents.

Special Remarks on Reactivity:

- Product is considered stable.
- Hazardous polymerization will not occur.

Special Remarks on Corrosivity: Not determined

11. TOXICOLOGICAL INFORMATION

The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion".

12. ECOLOGICAL INFORMATION

DO NOT discharge into sewer or waterways.

Sugar-based compounds (saccharides), including polysaccharides are generally easily decomposed by biodegradation

13. DISPOSAL CONSIDERATION

WASTE MANAGEMENT: Recycle wherever possible.

DISPOSAL METHODS: Dispose of in a manner consistent with federal, state, and local regulations.



14. TRANSPORT INFORMATION

U.S. DOT Not regulated as a hazardous material.

U.S. DOT CLASS: Not determined

Shipping Description: NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: ADR, IATA, IMDG

15. REGULATORY INFORMATION

Classification:

Toxicity: refer to section 11 and 12.

Poisons Schedule (SUSMP): None

REGULATIONS

starch (CAS: 9005-25-8) is found on the following regulatory lists;

This material is listed on the international standard such as OHSAS 18001:2007

EU Directive 2002/72/EC Plastic materials and articles intended to come into contact with foodstuffs - Annex III

Section A Incomplete list of additives fully harmonized at Community level

European Union (EU) Inventory of Ingredients used in Cosmetic Products

European Inventory of Existing Commercial Substances - EINECS

16. ADDITIONAL INFORMATION

Ingredient Name	CAS
Starch	9005-25-8

Yearly Revised Primary MSDS

Update in Toxicological Information

Update in Ecological Information

This MSDS summaries to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. TEAM cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.