

NUT Shells (all grades)

NUT Shells* cellulose is ground walnut or pecan hulls. It is used for the treatment of lost circulation. NUT Shells material is available in fine, medium, and coarse particle sizes, and may be used in all types and densities of fluid systems. NUT Shells material may be used as a granular type lubricant to reduce torque and drag.

Typical Physical Properties

| | |
|---------------------------|-------------------------------|
| Physical appearance | Tan to brown granules |
| Specific gravity | 1.2-1.4 |
| Solubility in water | Insoluble in water |
| Bulk density | 36 –40 lb/ft3(577 –641 kg/m3) |

Applications

Nut Shells cellulose is an effective lost circulation treating material. It has a granular shape, and can be used in a blend of various sizes (fine, medium, and coarse) to prevent lost circulation or regain returns once losses begin.

Nut Shells hulls are available in two types of material: pecan and walnut. The walnut hulls have greater strength. Treating levels depend on the severity of the losses and type of formation where the losses occur. Nut Shells material may be mixed with other shaped materials to provide a wide variation for optimum control. It may be used to treat the entire system or added as a concentrated pill.

Nut Shells material can be added to other special slurries, such as high fluid loss squeezes, to assist in forming strong bridging plugs.

Typical treating levels for preventative measures are from 2 to 5 lb/bbl (5.7 to 14.2 kg/m³), and for more severe losses use 5 to 25 lb/bbl (14.2 to 71.3 kg/m³).

Nut Shells material has a high compressive strength, and can be used, if desired, as a lubricant.

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Advantages

- Inert additive, compatible in all types and densities of fluids
- Will not ferment
- Unaffected by pH or temperature
- Based on particle shape, size, and compressive strength, it is a superior lost circulation additive.

Limitations

- Larger sized shale shaker screens will be needed to retain the material in the system.
- When using large concentrations in non water base fluids, increased amounts of wetting agent may be needed.

Toxicity and Handling

Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment and observing the precautions as described in the Material Safety Data Sheet (MSDS).

Packaging and Storage

Nut Shells material is packaged in 50-lb (22.7~kg) multi wall, paper sacks.

Store in a dry location away from sources of heat or ignition, and minimize dust.

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