



Shakun Polymers is part of  
Alphagary, an Orbia business



Polymer  
Solutions

alphagary

# Shakun Oil Resistant SHF2 – SPL-ZHFR-5300-XL

**SPL-ZHFR-5300-XL** is a high-performance, oil-resistant SHF2 compound designed for Offshore, Marine, Oil and Gas Cable applications. It is designed to withstand harsh environments, it offers excellent oil resistance, flame-retardancy, low smoke emission, halogen-free composition and high thermal stability, making it ideal for demanding offshore installations.

## What is SHF2?

SHF2 compounds, as classified by IEC 60092-360, are used for inner sheathing (bedding) and jacketing (sheathing) in marine, offshore, oil and gas- power, control, and instrumentation cables. These cross-linked, halogen-free, and flame-retardant materials provide enhanced oil resistance and durability ensuring long-term performance in extreme conditions.

## Why is Oil Resistance Important?

In offshore, marine, oil, and gas environments, cables are frequently exposed to various oils, including mineral and synthetic oils. Without proper resistance, these substances can cause chemical degradation, leading to premature cable failure. **SPL-ZHFR-5300-XL** is specially designed to withstand such exposure, ensuring long-lasting protection and performance.

## SPL-ZHFR-5300-XL – SHF2 Compound

**SPL-ZHFR-5300-XL** is a silane-grafted, moisture-curable compound when extruded with suitable catalyst it crosslinks under hot-water or sauna system. It provides good oil-resistance, electrical and thermal properties, making it an ideal choice for offshore, marine, oil & gas, and industrial applications.



Shakun Polymers is part of  
Alphagary, an Orbia business



Polymer  
Solutions

alphagary

### Key Benefits of SPL-ZHFR-5300-XL

- **Oil Resistance:** SPL-ZHFR-5300-XL is designed to resist chemical degradation from prolonged oil exposure.
- **Zero Halogen & Low Smoke:** Halogen-free composition ensures no toxic gas emissions, and its low smoke emission enhances visibility for safe evacuation during fire incidents.
- **Flame Retardant (IEC 60332-3 Compliant):** Limits flame propagation, providing enhanced fire safety in confined marine and offshore environments.
- **High Thermal Stability:** Cross-linked thermoset material withstands elevated operating temperatures, ensuring higher performance under heat.
- **Non-Corrosive & Safe:** Meets IEC 60754-1 & IEC 60754-2, ensuring that combustion gases are non-corrosive, reducing damage to sensitive electrical equipment.

SHF2 compounds, as classified by **IEC 60092-360**, are used for inner sheathing (bedding) and jacketing (sheathing) in marine, offshore, oil and gas- power, control, and instrumentation cables. These cross-linked, halogen-free, and flame-retardant materials provide enhanced oil resistance and durability ensuring long-term performance in extreme conditions.

### Typical Applications

SPL-ZHFR-5300-XL is widely used in:

- **Marine applications** (ships, offshore platforms, naval vessels)
- **Oil and gas industries** (refineries, drilling platforms, FPSOs)
- **Industrial environments** with high temperatures and oil exposure

SPL-ZHFR-5300-XL is the ideal choice for cable manufacturers looking for a high-performance, SHF2-oil-resistant solution that ensures safety, durability, and long-term reliability in harsh environments.