

SQUARE® SES12500

Methyl silicone oil

产品介绍

SQUARE® SES12500 是一种以硅氧键为主链、甲基为侧基的线性聚硅氧烷液体，凭借无机主链赋予的卓越热稳定性、耐低温性及电绝缘性，结合有机甲基带来的极低表面张力、高疏水性和生理惰性，使其在宽温度范围内保持粘度稳定且无毒无味；

SQUARE® SES12500 is a linear polysiloxane liquid with siloxane bonds as the main chain and methyl groups as the side groups. Thanks to the excellent thermal stability, low temperature resistance and electrical insulation provided by the inorganic main chain, combined with the extremely low surface tension, high hydrophobicity and physiological inertness brought by the organic methyl group, it maintains stable viscosity over a wide temperature range and is non-toxic and odorless.

特性及优势

- 耐高低温
- 低表面张力
- 良好电绝缘性
- 透气性与润滑性
- 高化学稳定性

Key Feature

- High and low temperature resistance
- Low surface tension
- Good electrical insulation
- Breathability and lubrication
- High chemical stability

应用

SQUARE® SES12500 主要用作日化护理中的柔滑与成膜组分、工业领域的润滑、阻尼、消泡、脱模及疏水整理剂，电子电气行业的绝缘、散热与防护介质，同时在纺织、涂料、塑料、医疗保健等行业中作为功能性助剂广泛应用。

Applicatio

SQUARE® SES12500 is primarily used as a smoothing and film-forming component in daily chemical care, a lubricant, damping, defoaming, release agent, and hydrophobic finishing agent in industrial fields, an insulating, heat dissipation, and protective medium in the electronics and electrical industries, and is also widely used as a functional additive in industries such as textiles, coatings, plastics, and healthcare.

典型数据 Product Data

性能/Performance	单位 /Unit	测试方法/Test methods	参考值/ Reference value	数值/Numerical values
颜色/Color	/	目测/Visual inspection		透明/Transparent
水分含量/Specific gravity	ppm	DIN51777	< 50	18.67
损耗因子/Dissipation factor(50Hz)		IEC60250	< 0.001	0.00027
体积电阻率/Volume resistivity	$\Omega \cdot \text{cm}$	IEC60247	$> 1 \cdot 10^{13}$	$4.37 \cdot 10^{14}$
击穿电压/Breakdown Voltage(2.5mm)	KV	IEC156	> 45KV	900
动态粘度/Dynamic Viscosity (25°C)	mPa·s	DIN53019	9700-13000	12500
密度/Density	g/cm^3	GB/T4472	0.96-0.98	0.97
运动粘度/Kinematic viscosity(25°C)	mm^2/s	GB/T265	10000-13125	12125
挥发物/Volatiles	%	150°C *3H	≤ 0.50	0.31

包装/ Package

200 千克/桶

200 kg/barrel

使用方法/ How to use

可直接用于工业润滑、阻尼减震、消泡、脱模、电气绝缘、散热及疏水处理等，粘度较高时可适当加温降低粘度后使用；

It can be used directly for industrial lubrication, damping and shock absorption, defoaming, demolding, electrical insulation, heat dissipation and hydrophobic treatment, etc. When the viscosity is high, it can be appropriately heated to reduce the viscosity before use.

注意事项/ Precautions

本品应密封储存于阴凉干燥通风处，远离高温、明火、强酸、强碱及强氧化剂，避免与锡、铂类催化剂混用以防凝胶失效，操作时做好皮肤及眼部防护，严禁直接排放，废弃物需按工业化学品相关规范处理。

This product should be stored in a sealed container in a cool, dry, and well-ventilated place, away from high temperatures, open flames, strong acids, strong alkalis, and strong oxidizers. Avoid mixing with tin or platinum catalysts to prevent gel failure. Protect your skin and eyes during handling. Direct discharge is strictly prohibited. Waste must be disposed of in accordance with relevant industrial chemical regulations.

*声明：本产品严格符合 REACH、ROHS、PAHs 及卤素等国际环保与安全检测标准。所列数据为基于实际测试与周期性验证得出的典型值或参考范围，不同批次产品可能存在合理差异。

*Statement: This product strictly complies with international environmental and safety testing standards such as REACH, RoHS, PAHs, and halogens. The data listed are typical values or reference ranges derived from actual testing and periodic verification; reasonable differences may exist between different batches of products.