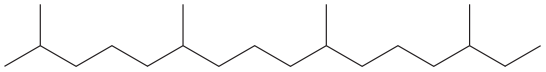
PRODUCT INFORMATION

Phytane

Item No. 46975

CAS Registry No.:	638-36-8
Synonyms:	2,6,10,14-Tetramethylhexadecane
MF:	$C_{20}H_{42}$
FW:	282.6
Purity:	≥95%
Supplied as:	A neat oil
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Synthetic



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Phytane is supplied as a neat oil. A stock solution may be made by dissolving the phytane in the solvent of choice, which should be purged with an inert gas. Phytane is soluble (≥10 mg/ml) in ethanol and DMSO.

Description

Phytane is an isoprenoid hydrocarbon and a degradation product of chlorophyll.[1] It is formed by dehydration and hydrogenation of phytol (Item No. 17401). The ratio of pristane to phytane (Pr/Ph) has been used to identify crude oil origin and sedimentary environments.[1,2] The ratio of n-octadecane to phytane has been used to monitor bioremediation of oil spills.[3]

References

1. Powell, T.G. and McKirdy, D.M. Relationship between ratio of pristane to phytane, crude oil composition and geological environment in Australia. *Nat. Phys. Sci.* **243**, 37-39 (1973).
2. Cheng, P., Gai, H., Xiao, X., *et al*. Evolution of the pristane/phytane ratio with maturity of lacustrine source rocks: Implications of a thermal simulation experiment. *ACS Earth Space Chem.* **7(5)**, 1072-1082 (2023).
3. Prince, R.C. Petroleum spill bioremediation in marine environments. *Crit. Rev. Microbiol.* **19(4)**, 217-242 (1993).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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