

# STRUB Vulcodur HC 12/15, 19/22, 19/32, 22 EM

Evaporation-resistant high-performance quenching oils

## Description

STRUB Vulcodur HC 12/15, 19/22, 19/32 and 22 EM are universal high-performance hardening oils based on high-quality, low-aromatic mineral oil solvent raffinates. Special additives ensure that particularly high cooling rates are achieved. STRUB Vulcodur 19/22 as well as 19/32, 22 EM are more resistant to evaporation.

## Application

STRUB Vulcodur HC 12/15 low-viscosity high-performance quenching oil for hardening of unalloyed and lowalloyed steels, highest quenching intensity, very stable against oxidation and long service life.

STRUB Vulcodur 19/22 and 19/32 for forgings and automotive springs via a wide variety of gear parts for cars, trucks and machine tools up to large-dimensioned shafts and gears for marine gearboxes. Also well suited for hardening distortion-sensitive rolling bearing parts and tools made of high-alloy tool steels. STRUB Vulcodur HC 22 EM emulsifies with water and is therefore easy to clean or rinse.

Batch quenching in

- Multi-purpose chamber furnaces and gas carburizing piercing plants
- Shaft furnace and bell furnace plants
- Flat shell / pusher shell plants

#### Features and advantages

- particularly intensive and uniform quenching effect
- high evaporation resistance at low viscosity
- good washability and low quenching oil consumption
- thermally stable
- long oil life

## **Technical data**

<b>ArtNo.</b> Density / 20°C Viscosity 40°C Flash point COC Flash point COC Pour point Application temperature	g/cm <sup>3</sup> mm <sup>2</sup> /s °C °C °C °C	HC 12/15 31195 0.840 14 190 210 -15 40 - 70	<b>19/22</b> <b>31184</b> 0.860 22 224 248 -15	<b>19/32</b> <b>30778</b> 0.850 32 230 254 -15	HC 22 EM 33140 0.860 22 225 249 -12
			50 - 130 from 100°C protective gas blanketing		

# Transport

ADR/SDR

No dangerous goods

#### **Disposal** LVA VeVA / EAK:

12 01 07

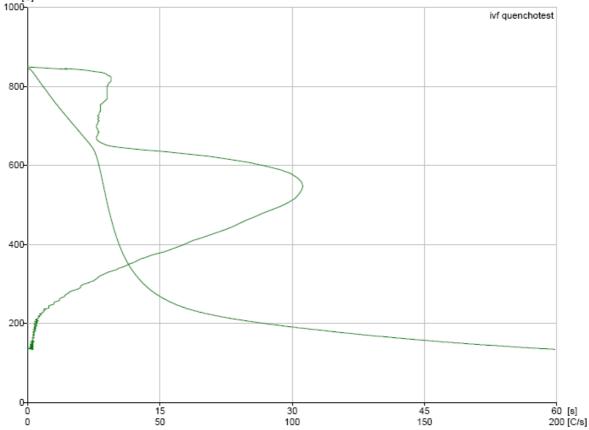
The information in this technical data sheet is based on general knowledge and application possibilities. STRUB + Co. AG is not liable for damage resulting from improper use of the products. The industry-standard measurement and production tolerances apply to the specified characteristic. Generally, no legal binding can be derived from these data. Our products are subject to continuous further development. Therefore, STRUB + Co. AG reserves the right to change all technical data in this data sheet at any time and without prior notice.

STRUB + Co. AG Swiss Tribology Mühlemattstrasse 5 CH-6260 Reiden phone +41 62 785 22 22 fax +41 62 785 22 33 strub@strub-lube.ch www.strub-lube.ch

ISO 9001|14001, Version 2: 10.07.2017 / MS-STA



Lieferant: Strub + Co. AG, Reiden Auftr. Nr.: 195735
Kunde: Strub + Co. AG, Reiden
Probe Nr.: 20703
Herkunft: Probe vom 19.1.07
Database: STRUB.QCW Date: 24.01.2007
Medium: Vulcodur 12/15
Femperatur: 60 C Jmwälzung: keine
onzentraling. Chick Concentration 0 %
Prüfstab Nr.: 167.0
20703 Vulcodur 12/15 104 [C/s] at 547 [C]
[C]
1000



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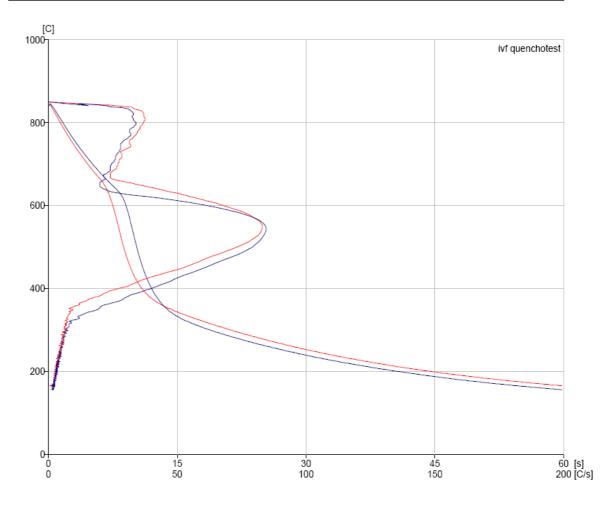
Mühlemattstrasse 5 CH-6260 Reiden

+41 62 785 22 22 +41 62 785 22 33 phone

strub@strub-lube.ch www.strub-lube.ch



Auftr. Nr.: Kunde: Probe Nr.: Herkunft:	Strub + Co. AG, Reiden 195735 Strub + Co. AG, Reiden 20701,V1 / 20702,V2 Probe vom 19.1.07 STRUB.QCW 25.01.2007			
	20701 Vulcodur 19/22 20702 Vulcodur 19/22	83 [C/s] at 85 [C/s] at		



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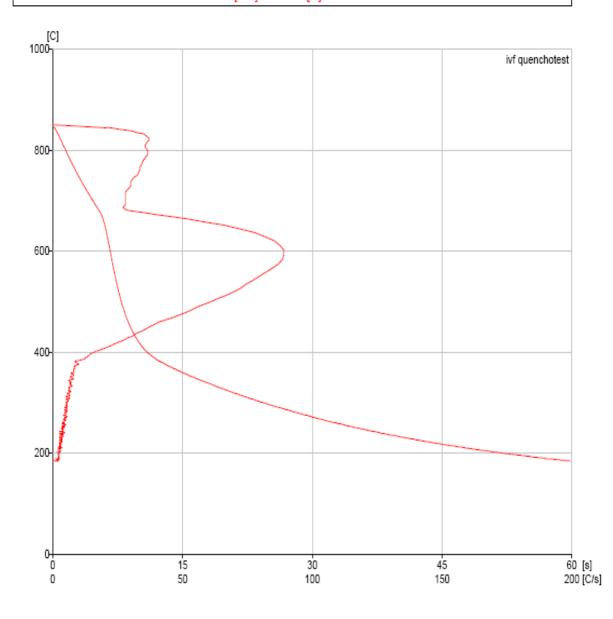
+41 62 785 22 22 +41 62 785 22 33 phone

strub@strub-lube.ch www.strub-lube.ch

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Lieferant: Strub & Co AG, Reiden Auftr. Nr.: 195431 Kunde: Strub & Co AG, Reiden Probe Nr.: 7 Herkunft: neu Nr.1 Database: STRUB.QCW Date: 15.06.2005	
Medium: Vulcodur 19/32 Temperatur: 85 C Umwälzung: keine Konzentration: 0 % Prüfstab Nr.: 167.0	
7 Vulcodur 19/32	89 [C/s] at 602 [C]



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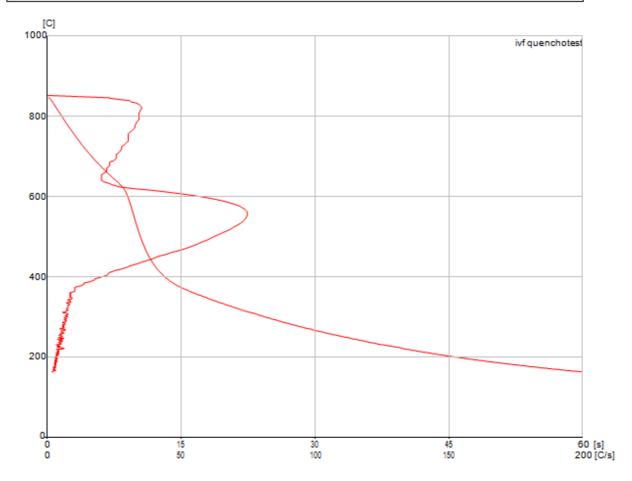
Mühlemattstrasse 5 CH-6260 Reiden

+41 62 785 22 22 +41 62 785 22 33 phone

strub@strub-lube.ch www.strub-lube.ch



Kunde: Auttragsnr.: Referenz: Herkunft: Entnahmedatum: Bemerkung: Prüfdatum:	Strub AG 2017-0109722-1 M. Strub 33140 11.09.2017 Endmessung 12.10.2017		
Quenchant: Temperatur: Agitation:	Strub Vulcodur 22 EN 60 C	1	
Prüfstabnr.:	162.0		
20	)171 Strub Härteöl 👘 7	5 [C/s] at	559 [C]



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+41 62 785 22 22 +41 62 785 22 33 phone

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