

# LUBRICATING OIL 润滑油

## Molyvan® 3000

摩擦改进剂

Molyvan® 3000  
是钼含量为 10%、具有独特支链结构的二烷基二硫代氨基甲酸钼 (MoDTC)。在油品中具有更好的低温溶解性，更好的减摩保持性和更强的成膜能力。

更多产品信息，请咨询：[petro@vanderbiltchemicals.com](mailto:petro@vanderbiltchemicals.com)  
[www.vanderbiltchemicals.com](http://www.vanderbiltchemicals.com), 010-56541175



# 目次

## 市场与趋势 Market & Trend

国内动车组齿轮箱润滑现状及发展趋势.....  
.....黄芸琪, 张朝前, 糜莉萍, 王玉玲, 徐立晖 (1)  
用核心价值设计润滑油技术服务..... 冯彦辉 (6)

## 油品研究与应用 Oil Research & Application

金属轧制油所需基础油的来源与生产..... 秦鹤年, 葛庆文(11)  
商用车液压转向系统用油与橡胶的相互作用考察.....  
..... 闫瑾, 许扬, 徐小鹏, 汪玉瑄, 王彦冬(16)  
车用柴油状况对柴油机机油的影响及柴油机机油选用建议.....  
..... 赵鹏, 何大礼, 吴章辉(20)  
柴油机机油对燃油经济性的影响因素分析.....  
..... 吴章辉, 何大礼, 赵鹏, 姜杨(25)  
220号油膜轴承油破乳化性能的优化研究.....  
..... 揭斌华, 吴晓涛, 谢颖, 覃雪梅, 王雪梅(30)  
风力发电机组主轴轴承润滑脂的研制及应用...高宇航, 王佳, 王庆日(35)  
在用导热油闪点降低的原因分析及对策..... 赵锡荣, 阴亭, 朱军(41)

## 添加剂 Additive

电厂用涡轮机油复配消泡剂的制备及其性能评价..... 窦鹏, 车美美(46)

## 分析与评定 Analysis & Evaluation

利用PDSC评价抗氧化剂对润滑油氧化安定性的影响..... 张守杰, 王鹏(51)  
几种新型的在用油分析方法..... 景莹莹, 孙树博,  
..... 宋洋, 李洪伟, 李睿琦, 丁冬梅, 刘晓磊, 朱光月, 王欢(55)  
全合成水基轧制液铝板表面润滑性能测试方法与现场相关性研究.....  
..... 周鑫, 兰奕, 孙晓婷(60)

## 简报 Brief

润滑油企业研发平台战略研究..... 刘春涛, 高洁, 眭瑞燕, 兰奕(63)

## 简讯 News

国六排放标准正式实施, 车用尿素迎来市场新发展..... 10  
我国润滑油添加剂行业市场现状分析..... 45



### 下期要目

- 1.高性能全合成SN 0W-40汽油机油自主技术的开发
- 2.固定式燃气发动机油在煤层气发电中的应用研究
- 3.低灰分清净剂研究进展
- 4.抗磨型无灰分散剂摩擦性能的研究

主管单位: 中国石油天然气集团公司

主办单位: 中国石油润滑油公司

编辑出版: 《润滑油》编辑部

编辑部地址: 大连市沙河口区中山路468号  
A1写字楼801室

邮编: 116021

采编部电话: (0411)84678975 / 84675373

广告、设计部电话: (0411)84678140 / 84676932

发行部电话: (0411)84678070

传真: (0411)84676932

E-mail: rhyedit@petrochina.com.cn

编委会主任: 肖宏伟

主编: 刘功德

责任编辑: 徐连芸

英文编辑: 孙永彦

广告、设计: 孙永彦 于硕

印刷: 大连市东晟印刷有限公司

出版日期: 2018年12月5日

国内总发行: 大连市邮电局

国内订阅处: 全国各地邮电局

国外总发行: 中国国际图书贸易总公司(北京399信箱)

国内邮发代号: 8-212

国外发行代号: BM4699

刊号: ISSN 1002-3119  
CN 21-1265/TQ

广告许可证: 大工商广字0276号

定价: 12.00元

CN 21-1265/TQ\*1986\*b\*A4\*64\*zh\*P\* ¥12.00\*\*14\*2018-12

# CONTENTS

## Market & Trend

Current status and development trend of gearbox lubrication of Chinese high-speed electric multiple unit .....  
..... Huang Yunqi,Zhang Chaoqian,Mi Liping,Wang Yuling,Xu Lihui(1)  
Designing lubricant technology service with core value ..... Feng Yanhui(6)

## Oil Research & Application

Source and production of base stocks for metal rolling oils .....  
..... Qin Henian,Ge Qingwen(11)  
Study on the compatibility of commercial vehicle hydraulic steering systems oil and rubber ..... Yan Jin,Xu Yang,Xu Xiaopeng,Wang Yuxuan,Wang Yandong(16)  
The influence of automotive diesel status on diesel engine oil and the selection suggestion of diesel engine oil..... Zhao Peng,He Dali,Wu Zhanghui(20)  
Analysis on influence factors of diesel engine oil on fuel economy .....  
..... Wu Zhanghui,He Dali,Zhao Peng,Jiang Yang(25)  
Optimization of demulsifying properties of No.220 oil-film bearing oil .....  
..... Jie Binhua,Wu Xiaotao,Xie Ying,Qin Xuemei,Wang Xuemei(30)  
Development and application of wind turbine main shaft bearing grease .....  
..... Gao Yuhang,Wang Jia,Wang Qingri(35)  
Reason analysis and countermeasures of the flash point reduction of the in-use heat transfer oil ..... Zhao Xirong,Yin Ting,Zhu Jun(41)

## Additive

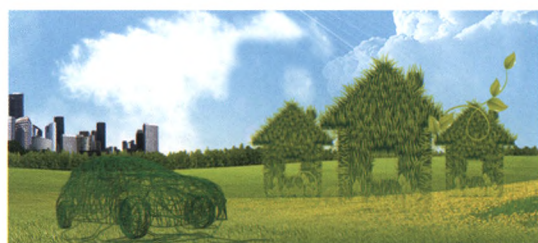
Preparation and performance evaluation of compounding defoaming agent used by turbine oil in power plant ..... Dou Peng,Che Meimei(46)

## Analysis & Evaluation

Evaluating the effect of antioxidants on the oxidation stability of lubricating oils by PDSC ..... Zhang Shoujie,Wang Peng(51)  
Several new analytical methods for in-service oils .....  
..... Jing Yingying,Sun Shubo,Song Yang,  
Li Hongwei,Li Ruiqi,Ding Dongmei,Liu Xiaolei,Zhu Guangyue,Wang Huan(55)  
A test method of lubrication performances for fully water-based rolling fluids on the surface of aluminum plate and its correlation study on scene .....  
..... Zhou Xin,Lan Yi,Sun Xiaoting(60)

## Brief

Study on lubricating oil enterprise R&D platform strategy .....  
..... Liu Chuntao,Gao Jie,Sui Ruiyan,Lan Yi(63)



## NEXT ISSUE CONTENTS

1. The development of high performance full synthetic SN 0W-40 gasoline engine oil with independent intellectual property
2. Study on the application of stationary gas engine oil in coalbed methane power generation
3. Investigation of low ash detergent
4. Tribological study of antiwear type ashless dispersing agent

**Responsible Institution:** China National Petroleum Corporation **Sponsor:** PetroChina Lubricant Company **Editor & Publisher:** Editorial Office of Lubricating Oil **Address:** Room 801, Building A1, No.468 Zhongshan Road, Shahekou District, Dalian 116021, China **Editorial:** (0411)84678975, 84675373  
**Advertising and Designing:** (0411)84678140, 84676932 **Subscriptions:** (0411)84678070 **Fax:** (0411)84676932 **E-mail:** rhyedit@petrochina.com.cn  
**Chairman of Editorial Committee:** XIAO Hong-wei **Editor in Chief:** LIU Gong-de **Editor in Charge of This Issue:** XU Lian-yun **English Editor:** SUN Yong-yan  
**Advertising and Designing:** SUN Yong-yan YU Shuo **Distributor (Domestic):** Dalian Post Office **Subscription (Domestic):** All Post Offices in China (Code No.8-212) **Distributor (Abroad):** China International Book Trading Corporation, P.O.Box399, Beijing, China (Code No.BM4699)



# 昆仑润滑

## 军工品质 大国重器



# KunLun

### 军工品质 大国重器

从新中国第一辆汽车到高铁，中国速度不断刷新；从远洋到极地，中国脚步不断拓展；从风力到核能，中国动力不断进化。昆仑润滑，以军工品质成就大国重器，守护中国不断向前。与每一个中国梦，每一颗中国心，并肩进发，无阻前行。

万方数据

国外发行代号：BM4699 国内邮发代号：8-212 定价：12.00元