
Petroleum liquids — Manual sampling

Produits pétroliers liquides — Échantillonnage manuel

www.iso.org



Reference number
ISO 3170:2004(E)

© ISO 2004

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2004

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 0111
Fax + 41 22 749 0947
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope.....	1
2 Normative references	1
3 Terms and definitions.....	1
4 Principles.....	6
5 Apparatus.....	7
5.1 General	7
5.2 Tank samplers	8
5.3 Drum and can samplers	22
5.4 Pipeline samplers.....	24
5.5 Sample receivers, vessels and containers.....	25
5.6 Container closures.....	27
5.7 Sample coolers.....	27
6 Safety precautions	27
7 Procedures for homogeneous petroleum liquids.....	27
7.1 Introduction	27
7.2 Precautions.....	28
7.3 Tank sampling	30
7.4 Pipeline sampling.....	36
7.5 Dispenser (nozzle) sampling.....	40
8 Procedures for crude oils and other non-homogeneous petroleum liquids.....	41
8.1 General	41
8.2 Procedures	41
9 Sample handling	43
9.1 General	43
9.2 Homogenization of samples.....	43
9.3 Verification of mixing efficiency.....	45
9.4 Transfer of samples.....	47
10 Sampling of tank residues/deposits	47
11 Package sampling	47
11.1 Statistical aspects of sampling packages	47
11.2 Procedures for sampling packages	49
Annex A (informative) Guidance on safety precautions.....	52
Bibliography	55