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Propylene and butadiene for industrial use — Sampling in the liquid phase

Propylène et butadiène à usage industriel — Échantillonnage en phase liquide

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 47, *Chemistry*.

This second edition cancels and replaces the first edition (ISO 8563:1987), which has been technically revised.

The main changes are as follows:

— Clauses 2 and 3 have been added.

— content from Clause 4, including safety precautions, has been moved elsewhere in the document;

— in Clause 5, explanations regarding apparatus have been added;

— in Clauses 5 and 6, some specific parameters, including size of connecting pipes and time to purge sampling cylinders, have been deleted;

— in 5.2, a recommendation regarding specially passivated sampling apparatus has been added.

— in 6.1, the procedure of purging the sampling cylinder for non-closed sampling has been revised;

— in 6.2, Annex C and Annex D, two closed-sampling apparatuses have been added.

— Annexes A and B, and Figures 1, 2, A.1 and B.1 have been revised.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Propylene and butadiene for industrial use — Sampling in the liquid phase

WARNING — The use of this document can involve hazardous material, operation and equipment. This document does not purport to address all of the safety problems associated with its use. It is the responsibility of the users of this document to take appropriate measures to ensure the safety, health of personnel prior to application of the document and fulfil other applicable requirement for this purpose.

1 Scope

This document describes the procedures and precautions to be taken in drawing representative samples of propylene and butadiene, in the liquid phase, for the purpose of their analysis.

Annex A sets out a diagrammatic representation of a system for the disposal of the portion of the sample not used in the analysis. Annexes B, C and D show the sequence of operations for filling a sampling cylinder in non-closed and closed sampling apparatus.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3165:1976, *Sampling of chemical products for industrial use — Safety in sampling*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
closed sampling apparatus
set of apparatus assembled by a sampling cylinder and connecting pipes to take samples under closed conditions, by which the sampling process does not permit the release of any sample or vapour to surrounding environment

3.2
non-closed sampling apparatus
set of apparatus assembled by a sampling cylinder and connecting pipes to take samples in open air, by which the sampling process permits the release of sample or vapour to surrounding environment

4 Safety precautions

The safety precautions in all sampling and testing operations with liquefied propylene and butadiene shall be carefully followed in accordance with ISO 3165:1976. Relevant legal and statutory regulations to ensure safety, health and environmental protection in the procedure of the sampling methods can apply.