

BS ISO 19246:2016



BSI Standards Publication

Rubber compounding ingredients — Silica — Oil absorption of precipitated silica



National foreword

This British Standard is the UK implementation of ISO 19246:2016.

The UK participation in its preparation was entrusted to Technical Committee PRI/50, Raw materials (including latex) for use in the rubber industry.

A list of organizations represented on this committee can be obtained on request to its secretary.

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© The British Standards Institution 2016.
Published by BSI Standards Limited 2016

ISBN 978 0 580 86997 6

ICS 83.040.10

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 July 2016.

Amendments/corrigenda issued since publication

Date	Text affected
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Rubber compounding ingredients — Silica — Oil absorption of precipitated silica

*Ingrédients de mélange du caoutchouc — Silice — Absorption d'huile
des silices précipitées*





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Foreword

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The committee responsible for this document is ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 3, *Raw materials (including latex) for use in the rubber industry*.

Introduction

Due to health and environmental safety precautions, the determination of DOA absorption number has been worked out to substitute the determination of the DBP absorption number.

Dibutylphthalate (DBP) and dioctylphthalate (DOP) were commonly used in the past for determining the absorption capacity of pigments and extenders, like carbon black and silica. In the meantime, both substances have been banned as carcinogenic, mutagenic, reprotoxic substances (CMR) in different countries.

The search of a suitable alternative for DBP and DOP, especially for measuring the absorption capacity of polar pigments and extenders, like silica, calcium silicates and sodium aluminium silicates has been carried out in a task group of the Association of Synthetic Amorphous Silica Producers (ASASP) between 2004-2008. Out of different tested liquids, like linseed oil, paraffinic oil, etc., DOA was found as the most suitable alternative which leads to evaluated absorption numbers close to DBP measurement.

