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GLOSSARY OF TERMS USED IN RUBBER INDUSTRY

PART 6 DEFINITIONS RELATING TO CELLULAR MATERIALS

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Indian Standard

GLOSSARY OF TERMS USED IN RUBBER INDUSTRY

PART 6 DEFINITIONS RELATING TO CELLULAR MATERIALS

0. FOREWORD

0.1 This Indian Standard (Part 6) was adopted by the Indian Standards Institution on 28 February 1986, after the draft finalized by the Rubber Sectional Committee had been approved by the Petroleum, Coal and Related Products Division Council.

0.2 This standard has been formulated with a view to eliminate ambiguity and confusion arising from different interpretations of terms used in rubber trade and industry and establishing a generally recognized usage.

0.3 Related terms have been grouped together under different sections. As the consideration of the definition of each term takes considerable time, the Committee responsible for preparation of this standard decided to publish it in parts. The first part IS : 7503 (Part 1)-1974 containing general terms, and terms relating to latex and physical and chemical properties; second part IS : 7503 (Part 2)-1976 containing terms relating to compounding, processes and machinery and vulcanization; third part IS : 7503 (Part 3)-1979 containing terms relating to calendering and coating and moulding; fourth part IS : 7503 (Part 4)-1979 containing terms relating to extrusion, and the fifth part IS : 7503 (Part 5)-1981 containing terms relating to hoses have already been published.

0.4 In the preparation of this standard considerable assistance has been derived from the following publications:

ISO 1382-1982 Rubber vocabulary. International Organization for Standardization.

BS 3558 : 1980 Glossary of rubber terms. British Standards Institution.

ASTM D 1566-1982 Standard definitions of terms relating to rubber. American Society for Testing and Materials.

0.5 In case there is any difference between the definitions in this glossary and those in the standards for individual materials, the latter shall prevail.

1. SCOPE

1.1 This standard (Part 6) defines the terms relating to cellular materials.

2. CELLULAR MATERIALS

2.1 Air Trap — Void in a cellular polymer.

2.2 Applied Skin — A thin surface layer of elastomeric material applied to a cellular product.

2.3 Blowing — Production of a cellular material by decomposition of an added ingredient.

2.4 Blowing Down — Removal of excess ammonia from latex by stirring the latex while passing a stream of air across the surface.

2.5 Break Down — Defects due to collapse of cell structure.

2.6 Cavity — Blind hole deliberately made or formed in a rubber moulded product, particularly a cellular rubber product.

2.7 Cell — A single small cavity surrounded partially or completely by walls.

2.8 Cellular — Consisting of a mass of cells.

2.9 Cellular Materials — A material having many cells (either open, closed or both), dispersed throughout its mass.

2.10 Cellular Rubber — Mass of cells in which the matrix is rubber.

2.11 Cellular Striation — A layer within a cellular material that differs greatly from the characteristic cell structure.

2.12 Closed Cell — A cell totally enclosed by its walls and hence non-inter-connecting with other cells.

2.13 Collapse — The inadvertent densification of a cellular material during its manufacture, resulting from breakdown of its cell structure.

2.14 Compression Hardness — Force required to produce a specified compression over all of the cellular material test piece under specified conditions.

2.15 Core — Mould part that projects to form a cavity in the moulded product, particularly for cellular products.

2.16 Expanded Rubber — Cellular rubber, having closed cells, made from a solid rubber compound.

2.17 Fissure — A split or crack in a cellular material.

2.18 Foam Rubber — Cellular rubber made directly from liquid starting materials and usually composed mainly of intercommunicating cells.

2.19 Indentation Hardness — Force required to produce a specified indentation in the cellular material under specified conditions.

2.20 Latex Foam Rubber — Foam rubber made from latex.

2.21 Mould Lid — Top part of a latex foam mould.

2.22 Open Cell — A cell not totally enclosed by its walls and hence inter-connecting with other cells or with the exterior.

2.23 Pot Mould — Mould having a jacket through which a fluid may be circulated for controlling temperature.

2.24 Rib — Wall between cavities.

2.25 Skin — A relatively dense layer at the surface of a cellular material.

2.26 Sponge Rubber — A cellular rubber made directly from solid dry rubber compound/mix consisting predominantly of open or inter-communicating cells.

2.27 Void — A cavity unintentionally formed in a cellular material and substantially larger than the characteristic individual cells.

2.28 Whip — Beating member of a latex frothing machine.

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