
Glossary of

Rubber terms

Glossaire des terms relatifs aux élastomères et aux caoutchoucs

Glossar von Elastomer- und Kautschukbegriffen

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Foreword

This British Standard has been prepared under the direction of the Rubber Standards Committee. It has been designed primarily to meet the needs of persons who are unfamiliar with some of the terms used in the rubber industry, but is also intended as a guide for the selection of recommended terms for use in British Standard test methods and specifications for rubber, and in other publications.

The glossary is almost entirely confined to those terms special to and in general use in the industry; it therefore does not include terms which may be expected to be included in a general dictionary. In some cases, where two or more terms have the same meaning, one is preferred and is printed in bold type; the others are printed in smaller, ordinary type and, if deprecated, they are so marked.

This standard was first published in 1962 and revised in 1968; it has again been revised to align its contents with current usage. The glossary does not purport to be comprehensive, and other terms in common use will be added in future revisions. Terms defined by the

International Organization for Standardization (ISO) have been adopted in this glossary, provided they are in line with United Kingdom usage, and attention is drawn to:

- (a) ISO 1382, 'Rubber vocabulary', together with addendum 1 and addendum 2 prepared by Technical Committee ISO/TC 45, Rubber and rubber products;
- (b) ISO 4223/1, 'Definitions of some terms used in the tyre industry — Part 1 : Pneumatic tyres', prepared by ISO/TC 31, Tyres, rims and valves.
- (c) ISO 3261, 'Fire tests — Vocabulary', prepared by ISO/TC 92, Fire tests on building materials and structures.

The revision contains outline sketches of some rubber products; they do not form part of any definition but are merely indicative and illustrative.

The fire terms contained in section two have been approved by BSI Committee OC/10, Coordinating committee on fire tests.

British Standard Glossary of Rubber terms

0. References

The titles of the standards publications referred to in this standard are listed on the inside back cover.

Section one. Rubbers and ingredients

1.1 General

No.	Term	Definition
1101	polymer	Substance composed of very large molecules which consist essentially of recurring structural units.
1102	elastomer	Macromolecular material that returns rapidly to approximately its initial dimensions and shape after substantial deformation by a weak stress and release of the stress.
1103	rubber	A solid material with elastic properties made from latex from living plants, or synthetically, and used in the manufacture of rubber products.
1104	rubber latex	Colloidal aqueous dispersion of natural or synthetic rubber.

1.2 Types of rubber

1201	natural rubber	Rubber formed in a living plant, usually <i>Hevea brasiliensis</i> .
1202	synthetic rubber	Man-made rubber prepared by polymerization from lower relative molecular mass materials.
1203	raw rubber	Natural or synthetic rubber of commerce forming the basic material for the manufacture of rubber articles. NOTE. It is normally free from compounding ingredients but may also, for example, take the form of a masterbatch with oil and/or filler.
1204	thermoplastic rubber	Polymeric substance that undergoes reversible changes with temperature, to give rubber-like properties at room temperature and thermoplastic properties at elevated temperature.
1205	vulcanized rubber	Rubber that has undergone vulcanization.
1206	antistatic rubber	Rubber that is electrically conducting to the extent that, when earthed, it will prevent the build-up of electric charges and dissipate any charges applied, without thereby presenting a risk of fire or electric shock.
1207	conducting rubber	Rubber with a sufficient degree of electrical conductivity to function as an electric current carrier. NOTE. A product made from these materials has higher electrical conductance than one made from antistatic rubber.

No.	Term	Definition
1208	ebonite hard rubber, <i>deprecated</i>	Hard, substantially inextensible vulcanizate whose glass transition lies above room temperature and which is produced upon the vulcanization of rubbers with a large proportion of sulphur, commonly in the order of 25 % to 50 % by mass on the rubber polymer.
1.3 Compounding ingredients		
1301	compounding ingredient	Substance added to a rubber polymer or latex to form a mix.
1302	accelerator	Compounding ingredient used in small amounts with a vulcanizing agent to increase the speed of vulcanization and/or enhance certain properties of the vulcanizate.
1303	delayed action accelerator	Accelerator whose effect markedly increases on reaching specific combinations of temperature and time.
1304	activator	Compounding ingredient used in small amounts to increase the effectiveness of an accelerator.
1305	retarder	Compounding ingredient used in small amounts to reduce the tendency of a mix to undergo vulcanization prematurely.
1306	antioxidant	Compounding ingredient used to retard deterioration caused by oxidation.
1307	antiozonant	Compounding ingredient used to retard deterioration caused by ozone.
1308	blowing agent	(a) In manufacture of cellular articles, a compounding ingredient used to produce gas or vapour by chemical and/or thermal action. (b) In the manufacture of hollow articles, a chemical, not incorporated into the rubber, used for inflation during curing.
1309	extender	Organic material used as a replacement for a portion of the raw rubber required in a mix or for blending with the raw rubber (e.g. in oil-extended rubbers).
1310	filler	Solid particulate compounding ingredient normally added in relatively large proportions to the rubber.
1311	reinforcing filler	Filler having a specific reinforcing effect, e.g. the ability to enhance abrasion resistance and mechanical strength properties.
1312	peptizer	Compounding ingredient used in small amounts to accelerate by chemical action the permanent softening of raw rubber under the influence of mechanical action and/or heat.
1313	pigment	Insoluble compounding ingredient used to impart colour.
1314	softener	Compounding ingredient used in small proportions to soften the vulcanizate, or to facilitate processing or incorporation of fillers.

Section two. Rubber properties and testing

2.1 General

2101	lot	Definite quantity of some commodity manufactured or produced under conditions that are presumed uniform.
2102	sample	One or more items taken at random from a lot and intended to provide information on the lot and possibly to serve as a basis for a decision on the lot or on the process that had produced it.
2103	test piece test specimen, <i>deprecated</i>	Piece of material of appropriate shape and size prepared so that it is ready for use in a test.

No.	Term	Definition
2104	test portion	Portion of a material set aside for the purposes of determining or estimating the identity of the material or some of its constituents or determining or estimating its ability to satisfy particular requirements.
2105	environmental conditioning	Storage of a test piece under specified conditions such as temperature, humidity, etc., for a specified time prior to testing.
2106	mechanical conditioning	Prescribed programme of deformation of a test piece prior to testing.

2.2 Chemical

2201	acetone extract	Material extracted from rubber by acetone under specified conditions.
2202	chloroform extract	Material extracted from rubber by chloroform under specified conditions after removal of the acetone extract.
2203	alcoholic potash extract	Material removed from rubber by treatment with alcoholic potassium hydroxide solution after removal of the acetone extract and/or the chloroform extract.
2204	water extract	Material extracted from rubber by water under specified conditions.
2205	bound rubber	Portion of the rubber polymer in a mix that is so closely associated with compounding ingredients as to be insoluble in the usual rubber solvents.
2206	gel rubber	Portion of raw rubber insoluble in a specified solvent.
2207	sol rubber	Portion of raw rubber soluble in a specified solvent.
2208	rubber hydrocarbon	Rubber polymer based solely on carbon and hydrogen.
2209	rubber polymer	Polymer or polymers constituting the basis of a rubber.
2210	total sulphur	All the sulphur present in a material, irrespective of its chemical form or origin.
2211	combined sulphur	Sulphur remaining in a vulcanizate after extraction by a prescribed method. NOTE. This term covers organically bound sulphur (bound, e.g., in rubber) and inorganically bound sulphur (bound, e.g. in barium sulphate).
2212	extractable sulphur	Sulphur content of the rubber that can be extracted by a specified solvent under specified conditions.
2213	free sulphur	Sulphur present in the rubber in the elemental form irrespective of its origin.
2214	sulphide sulphur	Sulphur present in the rubber as inorganic sulphide.

2.3 Mechanical and physical

2301	abrasion loss	Volume of rubber abraded from a specified test piece under specified conditions.
2302	abrasion resistance	Resistance to wear resulting from frictional action upon a surface. It is usually expressed by the abrasion resistance index.
2303	abrasion resistance index	Measure of the abrasion resistance of a vulcanized rubber relative to that of a standard vulcanized rubber under the same specified conditions and expressed as

$$\frac{S}{T} \times 100$$

where

S is the volume loss of a standard vulcanized rubber and

T is the volume loss of the vulcanized rubber under test.

NOTE. See BS 903 : Part A9.

No.	Term	Definition
2304	ageing	Irreversible change of material properties after exposure to an environment for a period of time.
2305	accelerated ageing test	Test in which an attempt is made to produce the effects of natural ageing in a shorter time by increasing the rate of degradation.
2306	air oven ageing test	Test in which ageing proceeds in an oven in air at an elevated temperature and at atmospheric pressure in the absence of light. NOTE. See BS 903 : Part A19 and BS 4443 : Part 4.
2307	oxygen pressure test oxygen bomb test	Accelerated ageing test in which ageing proceeds in a closed vessel containing oxygen at elevated temperature and pressure.
2308	bench marks reference marks	Marks of known separation applied to a test piece and used to measure strain.
2309	gauge length	Initial distance between bench marks.
2310	bloom	Liquid or solid layer or deposit on the surface of a material that has been formed by the diffusion of a substance from within the material.
2311	bulk density	Mass per unit volume of material including both open and closed cavities normally associated with the material.
2312	chalking	Formation of a powdery residue on the surface of a rubber resulting from surface degradation.
2313	crystallization	Orientation of the disordered long-chain molecules of a high polymer into repeating patterns.
2314	dynamic properties	Properties exhibited under cyclic stressing.
2315	fatigue	Permanent deterioration in mechanical properties in a material subjected to fluctuating stresses and strains.
2316	fatigue life	Number of cycles of stress or strain of a specified character that a given test piece will sustain before failure.
2317	cut growth test crack growth, <i>deprecated</i>	Test for the determination of the growth of a defined cut penetrating a test piece when subjected to cyclic flexing producing strains perpendicular to the length of the cut. NOTE. See BS 903 : Part A11.
2318	elasticity	Tendency of a body to return to its original size and shape after having been deformed.
2319	hysteresis	Ratio of energy lost to energy input in the rapid or instantaneous recovery of a deformed test piece.
2320	resilience	Ratio of energy output to energy input in a rapid or instantaneous recovery of a deformed test piece.
2321	viscoelasticity	Stress response of a material as though it were a combination of an elastic solid and a viscous fluid with flow dependent on time, temperature, load and rate of loading.
2322	Mullins effect	Reduction in the elastic modulus of a vulcanized rubber as a result of deformation and recovery.
2323	grain	Directional orientation of rubber and/or filler particles resulting in anisotropy of a material (e.g. calender grain, extruder grain).
2324	hardness	Resistance to indentation.

No.	Term	Definition
2325	international rubber hardness degrees (IRHD)	Measure of hardness, the magnitude of which is derived from the depth of penetration of a specified indenter into a test piece under specified conditions. International rubber hardness degrees are measured so that 0 ° represents a material showing no measurable resistance to indentation and 100 ° represents a material showing no measurable indentation. The scale is completely described in BS 903 : Part A26.
2326	micro-hardness	Measure of hardness using a scaled down version of the normal IRHD test, permitting the testing of thinner and smaller test pieces. NOTE. See BS 903 : Part A26.
2327	Shore D hardness	Measure of hardness, of American origin, derived from the penetration of a specified indenter into the test piece under specified conditions. It is defined fully in ASTM D 2240 'Standard test method for rubber property — Durometer hardness' and some details are given in BS 2719.
2328	impact resistance impact strength	Resistance to fracture under mechanical shock force.
2329	Mooney scorch	Time measure of incipient vulcanization characteristics of a rubber mix using a Mooney shearing disc viscometer. NOTE. See BS 1673 : Part 3.
2330	Mooney viscosity	Measure of the viscosity of a raw or unvulcanized rubber or a rubber mix, determined in a Mooney shearing disc viscometer. NOTE. See BS 1673 : Part 3.
2331	plasticity	Ability of a material to remain deformed after reduction of the deforming stress to or below its yield stress. NOTE. See BS 1673 : Part 3.
2332	plasticity number	Measure of plasticity that varies inversely with the ease of deformation.
2333	plasticity retention index (PRI)	Measure of the resistance of raw natural rubber to oxidation. It is expressed as the percentage ratio of the plasticity measured after air oven ageing for 30 min at 140 °C to the plasticity measured before ageing using a parallel plate plastimeter. NOTE. See BS 1673 : Part 3.
2334	plastimeter <i>plastometer, deprecated</i>	Instrument for measuring plastic flow.
2335	thermoplasticity	Ability to exhibit plastic flow with rise of temperature, to revert to comparative rigidity on cooling, and to repeat the cycle indefinitely.
2336	porosity	As applied to a defect, the accidental presence of numerous small cavities.
2337	quadruple shear test	Test for determination of shear modulus and bond strength in shear in which four parallelepipeds of vulcanized rubber are bonded to five rigid plates. NOTE. See BS 903 : Part A14 and Part A28.
2338	set	Deformation remaining after complete release of the force producing the deformation.
2339	compression set	Residual deformation of a test piece after removal of the compressive stress. Numerically, it is expressed as the percentage ratio of the residual deformation to the initial dimension of the test piece or to the compression strain.
2340	tension set tensile set	Extension remaining after a test piece has been stretched and allowed to retract in a specified manner, expressed as a percentage of the original test length or test strain.
2341	set after break	Tension set of a test piece stretched to rupture.
2342	shelf life storage life	Maximum storage time for which a material or product remains usable.
2343	strain	Change, due to force, in a dimension of a body  returned to its initial size.

No.	Term	Definition
2344	compression strain	Deformation produced in the test piece by a compression stress; it is the contraction in the direction of the stress expressed as a percentage of the original dimension in that direction.
2345	creep	Time-dependent change in dimensions resulting from an applied stress.
2346	elongation	Increase in length of a test piece produced by a tensile stress. NOTE. This property is usually expressed as a percentage of the original test length.
2347	elongation at break	Percentage elongation of the test length of a test piece at the moment of rupture.
2348	stress	Intensity, at a point in a body, of the forces or components of force that act on a given plane through the point. NOTE. Stress is expressed in force per unit area. As used in tension, compression or shear tests, stress is normally calculated on the basis of the original dimensions of the appropriate cross section of the test piece.
2349	compression stress	Stress applied so as to cause shortening or contraction of the test piece in the direction of the stress; it is expressed as the average force per unit area of the original cross section of the test piece.
2350	tensile stress	Stress applied to stretch a test piece; it is calculated by dividing the applied force by the original cross-sectional area of the test piece.
2351	tensile stress at a given elongation	Stress required to stretch the test length of the test piece to the given elongation. (<i>See</i> tensile stress.) NOTE. In the rubber industry this definition is widely identified with the term 'modulus', and care should be taken to avoid confusion with the other use of modulus to denote the slope of the stress-strain curve at a given elongation.
2352	tensile strength	Maximum tensile stress applied during stretching a test piece to rupture.
2353	necking	Localized reduction in cross-section which may occur in a material under tensile stress.
2354	sunlight checking sun checking, <i>deprecated</i>	Crazing or cracking of the surface of rubber due to exposure to sunlight.
2355	sunlight crazing	Development of a random pattern of shallow surface cracks on a rubber surface due to exposure to sunlight.
2356	swelling	Change in volume or linear dimensions of a test piece immersed in a liquid or exposed to a vapour.
2357	tack tackiness, <i>deprecated</i>	Ability of one rubber surface to adhere instantly to another on contact.
2358	tear strength	Maximum force required to tear a specified test piece, the force usually acting substantially parallel to the major axis of the test piece.
2359	crescent tear test	Test for tear strength determination using a test piece of crescent shape with a nick of specified depth at the midpoint of the concave edge to initiate tearing. NOTE. See BS 903 : Part A3.
2360	first order transition	Change of state, usually synonymous with crystallization or melting in a polymer.
2361	second order transition	Thermally induced physical change in the amorphous phase of a polymer which is associated with an abrupt change in the temperature coefficient of a physical property. NOTE. The measured transition temperature is dependent on the rate of deformation and the rate of temperature variation.

No.	Term	Definition
2362	glass transition	Second order transition between a brittle glassy condition and a rubber-like condition. NOTE. The midpoint of the temperature range over which this transition takes place is commonly called the 'glass transition temperature'.
2363	artificial weathering	Exposure of material to laboratory conditions involving temperature, moisture and radiant energy, some or all of which may be varied cyclically, in an attempt to produce changes similar to those observed after long-term continuous outdoor exposure. NOTE 1. The laboratory exposure conditions are usually intensified beyond those encountered in actual outdoor exposure in an attempt to achieve an accelerated effect. NOTE 2. This term does not cover exposure to special conditions such as ozone, salt spray, industrial gases etc.
2364	effect of weathering	Combined detrimental influences of outdoor environment (e.g. sunlight, ozone, humidity, temperature) on a material.
2.4 Fire terminology		
2401	burn	To undergo combustion.
2402	combustion	Reaction of a substance with an oxidizing agent, generally oxygen, with the release of heat generally accompanied by flaming and/or glowing and/or emission of smoke.
2403	fire	Process of combustion characterized by the emission of heat accompanied by smoke and/or flame.
2404	fire resistance	Ability of an element of building construction (component or structure) to fulfil for a stated period of time the required stability, integrity and/or thermal insulation specified in a standard fire resistance test. NOTE 1. See BS 4422 : Part 1. NOTE 2. The term 'fire resistance' is deprecated in any other connotation.
2405	flame (noun)	(Zone of) combustion in the gaseous phase with emission of light.
2406	glowing	Combustion of a material without flame but with the emission of visible light from the surface.
2407	ignition	Initiation of combustion
2408	rate of spread of flame	For a gas: rate of travel (propagation) of the flame front. For a solid: rate of travel (propagation) of the flame front over the surface. For a cellular material: rate of travel (propagation) of the flame front over the surface or through the material.
2409	smoke	Visible suspension in air of solid and/or liquid particles resulting from incomplete combustion.
2410	smouldering	Combustion of a material without light being visible and often evidenced by smoke. NOTE. The term 'self-extinguishing' is often used in the context of fire terminology. It is a misleading term which may suggest that materials have a much better safety characteristic than they in fact have.

Section three. Processes and machinery

3.1 Masticating and mixing

3101	composition formula, <i>deprecated</i> recipe, <i>deprecated</i>	Kinds and proportions of all ingredients contained in a mix.
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No.	Term	Definition
3102	formulation formula, <i>deprecated</i> recipe, <i>deprecated</i>	Statement of all ingredients and their proportions to be contained in a mix.
3103	mix compound	Intimate mixture of a polymer or polymers with all the ingredients necessary for the finished article.
3104	batch	Product of one mixing operation in an intermittent process.
3105	masterbatch	Homogeneous mixture of rubber and one or more compounding ingredients in known proportions for use as a raw material in the preparation of the final mix. NOTE. Masterbatches are used to facilitate processing or to enhance the properties of the final product, or both.
3106	mother stock	Type of masterbatch in which the compounding ingredients are present in a higher proportion than those required in the final mix.
3107	dough	Paste-like mass of smooth texture consisting of a mix and solvent for spreading.
3108	bale cutter	Press in which a bale of raw rubber is forced against a knife, so cutting it into pieces for more convenient handling.
3109	breakdown	Preliminary softening, by mechanical work, of raw rubber or a mix to render it more suitable for masticating, mixing or further processing.
3110	cracker	Heavy-duty mill having two deeply corrugated or pyramid-cut rolls for breaking down a rubber or a mix, or for cutting rubber or a mix into pieces.
3111	mastication breakdown, <i>deprecated</i>	Process of plasticizing raw rubber irreversibly by the combined action of mechanical work and oxygen, frequently at elevated temperature.
3112	plasticize	To render less viscous.
3113	mill	Machine with two driven rolls forming a nip for masticating, plasticizing, mixing or sheeting.
3114	roll	Roller or hollow cylinder forming a major moving member of a rubber processing machine.
3115	friction ratio	Ratio of surface speeds of two adjacent rolls (mill, calender or refiner).
3116	nip bite, <i>deprecated</i>	Radial clearance between roll surfaces of a mill or calender on the centre lines; space between the rolls used for milling or calendering a material.
3117	bank	Accumulation of material at the opening between the rolls of a mill or calender or at a spreader bar or knife.
3118	breaker pad mill bush	Member fitted into the frame of a mill or calender, designed to break preferentially in the event of overloading.
3119	knife bar	Bar carrying knives arranged for cutting sheeting longitudinally.
3120	stock blender	Device comprising one or more driven rollers mounted above, and used in conjunction with, a mill to improve blending of a mix.
3121	mixer	Machine used for mixing together polymers and compounding ingredients.
3122	internal mixer	Mixer having specially shaped rotor or rotors operating in a closed chamber.
3123	ball mill	Rotating drum, generally mounted horizontally and containing loose balls of hard material to pulverize coarse particles.

No.	Term	Definition
3124	blender	Vessel, fitted with movable blades, to convert the contents, usually compounding ingredients, into a uniform, homogeneous mixture.
3125	dough mill	Mill for homogenizing dough.
3.2 Calendering and coating		
3201	calender	Machine with two or more rolls for converting rubber, or a combination of rubber with other materials, into sheet of a controlled thickness.
3202	bowl	Term sometimes used for a roll of a calender.
3203	breast roll offset roll, <i>deprecated</i>	Roll whose axis is arranged parallel to that of the other rolls but not in the same vertical plane.
3204	doubling machine	Machine with two rolls for building thicker sheeting from plies of thinner sheeting.
3205	embossing machine	Machine with two or more rolls for embossing sheeting.
3206	profiling machine	Machine with two or more rolls of which at least one carries one or more circumferential grooves for converting rubber into strip having a predetermined contour.
3207	cross axis skew axis	Adjustment to the contour of the nip formed between two rolls of a calender by skewing the axis of one roll relative to the other.
3208	roll bending	Adjustment to the contour of the nip formed between two rolls of a calender by bending one or both rolls.
3209	roll deflection	Bending of the moving rolls particularly when a nip is loaded.
3210	camber crown, <i>deprecated</i>	Convexity of the longitudinal section of a roll.
3211	reverse camber	Concavity of the longitudinal section of a roll.
3212	blister bar	Bar parallel to a calender roll intended to minimize blistering during multiple bank calendering.
3213	creel	Apparatus for holding a large number of bobbins or spools of textile or steel cord allowing the cords to be brought together to form a layer.
3214	lease bars	Two or more metal bars interposed laterally between adjacent cords of a layer of cords to facilitate identification and tracing of individual cords.
3215	fish back cloth opening, <i>deprecated</i> herringbone bar, <i>deprecated</i> crimping bar, <i>deprecated</i>	Bar with corrugations so arranged that, when taut fabric is drawn across it, longitudinal wrinkles are removed.
3216	let-off gear take-up gear, <i>deprecated</i>	Apparatus for releasing material from a reel or box under controlled tension.
3217	tension stand	Assembly of large diameter rollers for tensioning fabric.
3218	take-off gear wind-up gear, <i>deprecated</i>	Apparatus for winding material on a reel or box from a calender or spreader under controlled tension.
3219	box shell, <i>deprecated</i>	Roller on which long lengths of rubber sheet or fabric are wound and temporarily stored during the processes of manufacture.

No.	Term	Definition
3220	book	Device consisting of several leaves of liner joined along one edge.
3221	spreader	Machine for distributing rubber dough or latex on the surface of sheet material by means of a blade.
3222	spreader chest	Part of a spreader consisting of a heated table, the function of which is to assist evaporation of solvent as the coated fabric passes over it.
3223	spreading knife doctor, <i>deprecated</i> doctor blade, <i>deprecated</i> doctor knife, <i>deprecated</i>	Blade used for spreading dough or latex smoothly and uniformly.
3224	frictioning	Process of impregnating woven fabric with rubber using a calender whose rolls rotate at different surface speeds.
3225	gum dipping	Process of impregnating textiles with rubber by immersion in rubber solution.
3226	heat stretching heat stabilizing	Process of adjusting the thermal and dimensional properties of a fabric under specific combinations of temperature, tension and time.
3227	proofing (<i>verb</i>) (<i>noun</i>)	Process of coating a fabric with rubber to impede penetration by a fluid, usually water. The rubber-coating of such fabric.
3228	strike-through	Penetration of rubber from a coated to an uncoated surface.
3229	skim coating (<i>verb</i>) (<i>noun</i>)	Process of applying rubber to the surface of sheet material using a spreader. The layer so applied.
3230	topping (<i>verb</i>) (<i>noun</i>) skim coating, <i>deprecated</i>	Process of applying rubber to the surface of sheet material using a calender. The layer so applied.
3231	proofed fabric	Composite produced by proofing.
3232	spread sheet	Sheet made by spreading rubber dough on a support from which the sheet is finally removed.
3233	face cloth	Fabric treated to give a smooth finish and used for temporary support of sheet rubber.
3234	liner	Sheet material used for temporarily interleaving sheets that would otherwise stick together.
3235	treated liner processed liner, <i>deprecated</i>	Liner that has been specially treated to improve its smoothness or to ease its separation from the rubber.
3236	chatter marks	Defect on calendered sheeting consisting of transverse narrow bands of alternately thicker and thinner material.
3237	cloth mark	Impression left on rubber by a fabric.
3238	cold checks cold shuts, <i>deprecated</i>	Defect on calendered sheeting consisting of surface roughness.
3239	crowsfeet	Small flowmarks of V shape on calendered sheeting.
3240	plucking	Tearing out of isolated portions from a rubber surface during separation from a second surface.

3.3 Extruding

No.	Term	Definition
3301	extrusion forcing, <i>deprecated</i>	Continuous shaping of a material by passage through a die.
3302	extruder forcer, <i>deprecated</i> forcing machine, <i>deprecated</i> tuber, <i>deprecated</i> tubing machine, <i>deprecated</i>	Machine for extrusion.
3303	extrudate extrusion, <i>deprecated</i>	Product of extrusion.
3304	strainer	Machine designed to force rubber through metal gauze screens to remove extraneous matter.
3305	pelletizer	Machine similar to a strainer for preparing pellets of rubber.
3306	screw scroll, <i>deprecated</i> worm, <i>deprecated</i>	Rotating member with a helical groove to propel rubber along the barrel of an extruder.
3307	extruder head	Part of an extruder which houses the die or die holder.
3308	T-head	Extruder head of T shape, to divert the flow of rubber to a direction at right angles to the axis of the screw, for direct extrusion round a core.
3309	Y-head	Extruder head of Y shape to direct together the simultaneous discharges from two extruders to a single die.
3310	V-block	Central member of a Y-head to maintain separation of the simultaneous discharges of two extruders.
3311	spider	Member with three or more spokes supporting the centre in the head of the extruder.
3312	pre-former	Member interposed between the extruder head and die to unify the rate of flow of rubber through the die.
3313	bridge	Two-spoked member supporting the centre in the head of the extruder.
3314	die	Detachable part of an extruder producing the profile of an extrudate.
3315	die holder nozzle, <i>deprecated</i> die box, <i>deprecated</i>	Device for locating the die in relation to the extruder head.
3316	variable die	Die comprising two or more components each adjustable relative to the other(s).
3317	centre cone core	Part on the die which shapes the internal profile of an extrudate.
3318	tip	Detachable conical end of a centre.
3319	chalk blower	Device for applying a powder to the inner surface of a tubular extrudate as it leaves the die.
3320	haul-off gear take-up gear, <i>deprecated</i>	Equipment for pulling an extrudate from an extruder.

No.	Term	Definition
3321	extrusion mark score line	Mark or line formed accidentally in an extruder on an extrudate.
3322	die line	Longitudinally raised identification line formed deliberately on an extrudate.
3323	spider line	Radial line on a cross section of an extrudate corresponding to the spokes of a spider or bridge.
3.4 Moulding		
3401	moulding process	Process of shaping a material within a mould by applying pressure and usually heat.
3402	moulded product	Object produced in a closed mould (e.g. by compression moulding, injection moulding or transfer moulding).
3403	compression moulding	Moulding process in which the blank is placed directly in the mould cavity and compressed to shape by closure of the mould.
3404	injection moulding	Moulding process in which a predetermined quantity of mix is forced into a closed heated mould from a separate heating chamber.
3405	slab moulding	Process of compression moulding in which a multicavity mould is charged with a single slab or sheet of mix.
3406	transfer moulding injection moulding, <i>deprecated</i>	Moulding process in which a predetermined quantity of mix is forced into a closed heated cavity or cavities from a heat chamber integral with the mould.
3407	moulding pressure	Force applied by the press divided by the projected area of the mould cavity or cavities.
3408	compression mould	Mould for compression moulding.
3409	former	Shaped rigid object on or in which a rubber article is formed either by dipping, moulding or manipulation and from which it is subsequently removed.
3410	transfer mould	Mould for transfer moulding.
3411	pot mould	Mould having a jacket through which a fluid may be circulated for controlling temperature.
3412	core pin	Pin, being part of a mould, to form a hole in a moulded product.
3413	draw	Taper on the member or members of a mould to facilitate the extraction of a moulded product.
3414	frame	Metal plate with a large, shaped hole which, when used between flat plates, forms a mould.
3415	insert pin moulding pin	Pin to place and hold in position an insert during a moulding operation.
3416	land	Contact area substantially normal to the direction of closing between two separate parts of a mould.
3417	core plug, <i>deprecated</i>	Mould part that projects to form a cavity in the moulded product, particularly for cellular products.
3418	mould lid	Top part of a latex foam mould.