



Standard Terminology for Abbreviated Terms Relating to Plastics¹

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This standard has been approved for use by agencies of the Department of Defense.

1. Scope*

1.1 The purpose of this terminology is to provide uniform contractions of terms relating to plastics. Abbreviated terminology has evolved through widespread common usage. This compilation has been prepared to avoid both the occurrence of more than one abbreviated term for a given plastics term and multiple meanings for abbreviated terms.

1.2 The scope of these abbreviated terms includes plastics terms pertaining to composition and relating to type or kind according to mode of preparation or principle distinguishing characteristics. Also included are abbreviated terms for terms relating to copolymers, blends and alloys of plastics, and additives such as plasticizers, fillers, etc.

NOTE 1—A code relating to the composition of rubbers is given in Practice D1418.

1.3 No attempt is made here to systematize formally a shorthand terminology for polymers. Terminology, including nomenclature, codes, symbols, and formula designations for use in scientific literature in the field of natural and synthetic polymers, are being studied and standardized by the International Union of Pure and Applied Chemistry.²

1.4 These abbreviated terms are by no means all-inclusive of plastics terminology. They represent, in general, those terms that have come into established use. Since it is recognized that abbreviated terms serve no useful purpose unless they are generally accepted and used, no attempt has been made to establish a rigorous code for devising standard abbreviated terms. This would result in awkward departures from established usage of existing and accepted abbreviated terms and lead to cumbersome combinations in the future, which would not be likely to receive widespread acceptance. The abbreviated terms now in use have grown naturally out of the need for convenient, readily comprehended shorthand for long chemical names. This process can be expected to continue along the

natural lines of least resistance and will serve as a basis for further standardization as the need arises. A general guide for the preparation of abbreviated terms appears desirable, however, to facilitate more organized and uniform standardization in the future. An appendix is attached, which suggests a uniform way to prepare abbreviated terms.

1.5 Note that the uppercase letter F should be used to designate phosphate and that other elements may also be designated F.

1.6 An abbreviated term (FR) and code numbers are provided to identify classes of materials used as flame retardants added to plastics. The system is provided for use in situations where marking of plastics products is desired.

NOTE 2—Many of the abbreviated terms, codes, numbers, and symbols in ISO 1043 parts 1 through 3 and in ISO/DIS 1043-4 are the same as the corresponding item in ASTM D1600. D1600 includes a number of abbreviated terms that are not in ISO 1043.

2. Referenced Documents

2.1 ASTM Standards:³

D883 Terminology Relating to Plastics
D1418 Practice for Rubber and Rubber Latices—
Nomenclature
D1972 Practice for Generic Marking of Plastic Products

2.2 ISO Standards:

ISO 472:1988 Plastics—Vocabulary⁴
ISO 1043-1:2001 Plastics—Symbols—Part 1: Basic Polymers and Their Special Characteristics⁴
ISO 1043-2:2000 Plastics—Symbols—Part 2: Fillers and Reinforcing Materials⁴
ISO 1043-3:1996 Plastics—Symbols—Part 3: Plasticizers⁴
ISO/DIS 1043-4:1998 Plastics—Symbols and Abbreviated Terms—Part 4: Flame Retardants⁴
ISO 11469:2000 Plastics—Generic Identification and Marking of Plastics Products⁴

¹ This terminology is under the jurisdiction of ASTM Committee D20 on Plastics and is the direct responsibility of Subcommittee D20.92 on Terminology.

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² “Report on Nomenclature in the Field of Macromolecules,” *Journal of Polymer Science*, Vol VIII, 1952, pp. 257–277.

³ For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard’s Document Summary page on the ASTM website.

⁴ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.

*A Summary of Changes section appears at the end of this standard

3. Terminology

3.1 Definitions:

3.1.1 For definitions of general terms, see Terminology

D883.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *flame retardant, FR, n*—a substance that markedly retards the propagation of a flame. (See ISO 472.)

3.2.1.1 *Discussion*—Flame retardants may be incorporated in plastics as additives (external flame retardant) or as chemical groups in the base polymer by use of reactive intermediates in the polymerization process (internal flame retardant). The code numbers in this standard are restricted to external flame retardants.

4. Terms and Abbreviated Terms

4.1 Plastics and Resins:⁵

Term	Abbreviated Term	Term	Abbreviated Term
Acrylonitrile/butadiene plastics	AB	Chlorinated polyethylene	CPE
Acrylonitrile-butadiene-acrylate plastics	ABA	Cresol-formaldehyde resin	CF
Acrylonitrile-butadiene-styrene plastics	ABS	Epoxy, epoxide	EP
Acrylonitrile-chlorinated polyethylene-styrene plastics	ACPES	Ethyl cellulose	EC
Acrylonitrile-ethylene-styrene plastics	AES	Ethylene-chlorotrifluoroethylene copolymer	E-CTFE
Acrylonitrile-methyl acrylate-acrylonitrile-butadiene rubber	AMAB	Ethylene-ethyl acrylate plastics	EEA
Acrylonitrile-methyl methacrylate plastics	AMMA	Ethylene-methacrylic acid plastics	EMA
Acrylonitrile-styrene-acrylate plastics	ASA	Ethylene-propylene polymer	EPM
Acrylonitrile/ethylene-propylene-diene/styrene	AEPDMS	Ethylene-propylene-diene plastics	EPD
Aromatic polyester	ARP	Ethylene-tetrafluoroethylene copolymer	ETFE
		Ethylene-vinyl acetate plastics	EVA
		Ethylene-vinyl alcohol copolymer	EVOH
Carboxymethyl cellulose	CMC	Fluorocarbon perfluoromethoxy	MPA
Casein	CS	Furan formaldehyde resin	FF
Caseine-formaldehyde resin	CSF	High density polyethylene plastics	HDPE
Cellulose acetate	CA	High impact-resistant polystyrene	HIPS
Cellulose acetate-butyrate	CAB	Impact resistant polystyrene	IPS
Cellulose acetate propionate	CAP	Linear low density polyethylene plastics	LLDPE
Cellulose formaldehyde	CEF	Linear medium density polyethylene plastics	LMDPE
Cellulose nitrate	CN	Liquid crystal polymer	LCP
Cellulose plastics, general	CE	Low density polyethylene plastics	LDPE
Cellulose propionate	CP	Medium density polyethylene plastics	MDPE
Cellulose triacetate	CTA	Melamine-formaldehyde resin	MF
Chlorinated poly(vinyl chloride)	CPVC	Melamine/phenol-formaldehyde resin	MPF
		Methacrylate-butadiene-styrene plastics	MBS
		Methyl cellulose	MC
		Methyl methacrylate-acrylonitrile-butadiene-styrene resin	MMABS
		Nylon (see also polyamide)	PA
		Perfluoro(alkoxy alkane)	PFA
		Perfluoro(ethylene-propylene) copolymer	FEP
		Perfluoromethoxy resin	MFA
		Phenol-formaldehyde resin	PF
		Phenol-furfural resin	PFF
		Poly(acrylic acid)	PAA
		Poly(allyl diglycol carbonate)	PADC
		Poly(aryl ether ketone)	PAEK
		Poly(butyl acrylate)	PBA
		Poly(butylene terephthalate)	PBT
		Poly(cyclohexylenedimethylene cyclohexandicarboxylate), glycoland acid comonomer	PCCE
		Poly(cyclohexylenedimethylene terephthalate)	PCT

⁵ To prevent any confusion with or misuse of the registered trademark, PET[®] Milk, the guidelines of 8.1 shall be followed.

Term	Abbreviated Term	Term	Abbreviated Term
Poly(cyclohexylenedimethylene terephthalate), acid comonomer	PCTA	Polystyrene	PS
Poly(cyclohexylenedimethylene terephthalate), glycol	PCTG	Polysulfone	PSU
Poly(diallyl phthalate)	PDAP	Polytetrafluoroethylene	PTFE
Poly(ester urethane)	PAUR	Polyurethane	PUR
Poly(ether block amide)	PEBA		
Poly(ether sulfone)	PESU	Saturated polyester plastic	SP
Poly(ether urethane)	PEUR	Silicone plastics	SI
Poly(ethylene oxide)	PEOX	Styrene- α -methylstyrene plastic	SMS
Poly(ethylene terephthalate)	PET ⁵	Styrene-acrylonitrile plastic	SAN
Poly(ethylene terephthalate) glycol comonomer	PETG	Styrene-butadiene plastic	SB
Poly(lactic acid)	PLA	Styrene-butadiene-styrene block copolymer	SBS
Poly(methyl methacrylate)	PMMA	Styrene-ethylene/butylene-styrene block copolymer	SEBS
Poly(methyl methacrylimide)	PMMI	Styrene-ethylene/propylene-styrene block copolymer	SEPS
Poly(methyl- α -chloroacrylate)	PMCA	Styrene-isoprene-styrene block copolymer	SIS
Poly(phenyl sulfone)	PPSU	Styrene-maleic anhydride plastics	S/MA
Poly(phenylene ether) (or Poly(phenylene oxide), a deprecated term)	PPE	Styrene-rubber plastics	SRP
Poly(phenylene sulfide)	PPS	Thermoplastic elastomer	TPE
Poly(phenylene sulfone)	PPSU	Thermoplastic elastomer, ether-ester	TEEE
Poly(propylene oxide)	PPOX	Thermoplastic elastomer, fully crosslinked elastomer alloy	FCEA
Poly(vinyl acetate)	PVAC	Thermoplastic elastomer, highly crosslinked	HCTPV
Poly(vinyl alcohol)	PVOH	thermoplastic vulcanizate	
Poly(vinyl butyral)	PVB	Thermoplastic elastomer, olefinic	TEO
Poly(vinyl carbazole)	PVK	Thermoplastic elastomer, polyether block amide	PEBA
Poly(vinyl chloride)	PVC	Thermoplastic elastomer, styrenic	TES
Poly(vinyl chloride-acetate)	PVCA	Thermoplastic elastomer styrenic, saturated	TESS
Poly(vinyl fluoride)	PVF	Thermoplastic elastomer styrenic, unsaturated	TESU
Poly(vinyl formal)	PVFM	Thermoplastic polyester	TPES
Poly(vinyl pyrrolidone)	PVP	Thermoplastic polyester:	
Poly(vinylidene chloride)	PVDC	Copolyester [poly(aryl terephthalate)]	ARP
Poly(vinylidene fluoride)	PVDF	Polyarylate [poly(aryl terephthalate)]—liquid crystal	PAT
Poly(ϵ -caprolactone)	PCL		
Poly-4-methylpentene-1	PMP	polymer	
Poly- α -methylstyrene	PMS	Thermoplastic polyurethane	TPU
Poly-p-oxybenzoate	POB	Thermoplastic polyurethane, reinforced	RTPU
Polyacrylonitrile	PAN	Thermoset polyurethane	TSPU
Polyamide (nylon)	PA		
Polyamide 11	PA11	Ultra-high molecular weight polyethylene	UHMWPE
Polyamide 12	PA12	Unsaturated polyester	UP
Polyamide 1212	PA1212	Urea-formaldehyde resin	UF
Polyamide 46	PA46		
Polyamide 6	PA6	Vinyl chloride-ethylene resin	VCE
Polyamide 610	PA610	Vinyl chloride-ethylene-methyl acrylate resin	VCEMA
Polyamide 612	PA612	Vinyl chloride-ethylene-vinyl acetate resin	VCEVAC
Polyamide 66	PA66	Vinyl chloride-methyl acrylate resin	VCMA
Polyamide 69	PA69	Vinyl chloride-methyl methacrylate resin	VCMAA
Polyamide-imide	PAI	Vinyl chloride-octyl acrylate resin	VCOA
Polyarylate	PAR	Vinyl chloride-vinyl acetate resin	VCVAC
Polyaryl amide	PARA	Vinyl chloride-vinylidene chloride resin	VCDVC
Polyarylether	PAE	Vinylidene fluoride	VDF
Polyarylsulfone	PASU		
Polybutadiene-acrylonitrile	PBAN		
Polybutadiene-styrene	PBS		
Polybutene-1	PB		
Polycarbonate	PC		
Polychlorotrifluoroethylene	PCTFE	Acrylonitrile-butadiene-acrylate plastics + poly(methyl methacrylate)	ABA+PMMA
Polyester alkyd (or polyacrylate)	PAK	Acrylonitrile-butadiene-acrylate plastics+poly(vinyl chloride)	ABA+PVC
Polyetheretherketone	PEEK	Acrylonitrile-butadiene-acrylate plastics+polycarbonate	ABA+PC
Polyetheretherketoneketone	PEEKK	Acrylonitrile-butadiene-styrene plastics+poly(vinyl chloride)	ABS+PVC
Polyetherketoneetherketoneketone	PEKK	Acrylonitrile-butadiene-styrene plastics+polyphenylene sulfone	ABS+PPSU
Polyetherketoneketone	PEI	Acrylonitrile-butadiene-styrene	ABS+PTFE
Polyetherimide	PEK	plastics+polytetrafluoroethylene	
Polyetherketone	PE	Acrylonitrile-butadiene-styrene plastics+styrene maleic anhydride	ABS+SMA
Polyethylene	PEN	Acrylonitrile-butadiene-styrene plastics+thermoplastic polyurethane	ABS+TPU
Poly(ethylene naphthalate)	PHB	Acrylonitrile-butadiene-styrene plastics+polyamide	ABS+PA
Polyhydroxy butyrate	PI	Acrylonitrile-butadiene-styrene plastics+polycarbonate	ABS+PC
Polyimide	PISU	Acrylonitrile-styrene-acrylate plastics+poly(methyl methacrylate)	ASA+PMMA
Polyimidesulfone	PIB	Acrylonitrile-styrene-acrylate plastics+polycarbonate	ASA+PC
Polyisobutylene	PIR		
Polyisocyanurate	PK		
Polyketone	PMI		
Polymethacrylimide	POM		
Polyoxymethylene, polyacetal	PPA		
Polyphthalamide	PP		
Polypropylene			

4.2 Blends and Alloys of Plastics:

Term	Abbreviated Term
Acrylonitrile-butadiene-acrylate plastics + poly(methyl methacrylate)	ABA+PMMA
Acrylonitrile-butadiene-acrylate plastics+poly(vinyl chloride)	ABA+PVC
Acrylonitrile-butadiene-acrylate plastics+polycarbonate	ABA+PC
Acrylonitrile-butadiene-styrene plastics+poly(vinyl chloride)	ABS+PVC
Acrylonitrile-butadiene-styrene plastics+polyphenylene sulfone	ABS+PPSU
Acrylonitrile-butadiene-styrene	ABS+PTFE
plastics+polytetrafluoroethylene	
Acrylonitrile-butadiene-styrene plastics+styrene maleic anhydride	ABS+SMA
Acrylonitrile-butadiene-styrene plastics+thermoplastic polyurethane	ABS+TPU
Acrylonitrile-butadiene-styrene plastics+polyamide	ABS+PA
Acrylonitrile-butadiene-styrene plastics+polycarbonate	ABS+PC
Acrylonitrile-styrene-acrylate plastics+poly(methyl methacrylate)	ASA+PMMA
Acrylonitrile-styrene-acrylate plastics+polycarbonate	ASA+PC

Term	Abbreviated Term	Term	Abbreviated Term
Fully crosslinked elastomeric alloy	FCEA	Diundecyl phthalate	DUP
Poly(butylene terephthalate)+poly(ethylene terephthalate)	PBT+PET ⁵	Epoxidized linseed oil	ELO
		Epoxidized soya bean oil	ESO
Poly(butylene terephthalate)+rubber	Abbreviated PBT+RBR	Heptyl nonyl undecyl adipate	HNUA
Poly(ethylene naphthalate)	PEN	Heptyl nonyl undecyl phthalate	HNUP
Poly(ethylene terephthalate)+poly(methyl methacrylate)	PET ⁵ +PMMA	Hexyl octyl decyl adipate	HXODA
Poly(ethylene terephthalate)+poly(phenylene sulfone)	PET ⁵ +PPSU	Hexyl octyl decyl phthalate	HXODP
Poly(ethylene terephthalate)+rubber	PET ⁵ +RBR	n-Octyl decyl trimellitate	ODTM
Poly(phenylene ether)+impact resistant polystyrene	PPE+IPS	Nonyl undecyl adipate	NUA
Poly(phenylene sulfide)+polytetrafluoroethylene	PPS+PTFE	Nonyl undecyl phthalate	NUP
Poly(vinyl chloride)+chlorinated polyethylene	PVC+CPE		
Poly(vinyl chloride)+nitrile-butadiene rubber	PVC+NBR	Octyl decyl adipate	ODA
Poly(vinyl chloride)+poly(methyl methacrylate)	PVC+PMMA	Octyl decyl phthalate	ODP
Poly(vinyl chloride) plastics+polyurethane	PVC+PUR		
Polyamide (amorphous) blend	PA +	Tetraoctyl pyromellitate (tetra-2-ethylhexyl pyromellitate)	TOPM
Polyamide plastics+ethylene-methacrylic acid (ionomer)	PA+EMA	Trichloroethyl phosphate	TCEF
Polyamide+poly(phenylene ether)	PA+PPE	Tricresyl phosphate (or tritolyl phosphate)	TCF
Polyamide+polyethylene	PA+PE	Triheptyl trimellitate	THTM
Polyamide+rubber	PA+RBR	Triisooctyl trimellitate	TIOTM
Polyamide+styrene-acrylonitrile plastics	PA+SAN	Trioctyl phosphate	TOF
Polycarbonate+poly(butylene terephthalate)	PC+PBT	Trioctyl trimellitate (tri-2-ethylhexyl trimellitate)	TOTM
Polycarbonate+poly(ethylene terephthalate)	PC+PET ⁵	Triphenyl phosphate	TPP
Polycarbonate+polyethylene	PC+PE	Trixylyl phosphate	TXF
Polycarbonate+styrene-maleic anhydride	PC+SMA		
Polycarbonate+thermoplastic polyurethane	PC+TPU		
Polyoxymethylene+polytetrafluoroethylene	POM+PTFE		
Polyoxymethylene+rubber	POM+RBR		
Polyurethane+polyisocyanate	PUR+PIR		
Styrene-maleic anhydride plastics+impact resistant polystyrene	SMA+IPS		
Thermoplastic elastomer-chlorinated ethylene alloy	TECEA		

4.3 Plastic and Resin Additives:

Term	Abbreviated Term	Term	Abbreviated Term
Alkylsulfonic acid ester	ASE	Allyl diglycol carbonate	ADC
Benzyl butyl phthalate	BBP	Chlorotrifluoroethylene	CTFE
Benzyl octyl adipate (benzyl 2-ethylhexyl adipate)	BOA	Diallyl chlorendate (diallyl ester of 1,4,5,6,7,7-hexachlorobicyclo-(2,2,1)-5-heptene-2,3-dicarboxylic acid)	DAC
Benzyl octyl phthalate (benzyl 2-ethylhexyl phthalate)	BOP	Diallyl fumarate	DAF
		Diallyl isophthalate	DAIP
		Diallyl maleate	DAM
		Diallyl phthalate (diallyl orthophthalate)	DAP
Di-n-octyl phthalate	DNOP	Methyl methacrylate	MMA
Dibutylphthalate	DBP	Tetrafluoroethylene	TFE
Dibutyl sebacate	DBS	Triallyl cyanurate	TAC
Dicapryl phthalate	DCP		
Dicylohexyl phthalate	DCHP		
Didecyl phthalate	DDP		
Diethyl phthalate	DEP		
Diheptyl phthalate	DHP		
Dihexyl phthalate	DHXP		
Diisobutyl phthalate	DIBP		
Diisodecyl adipate	DIDA		
Diisodecyl phthalate	DIDP		
Diisooctyl phthalate	DIHP		
Diisohexyl phthalate	DIHXP		
Diisononyl adipate	DINA		
Diisononyl phthalate	DINP		
Diisooctyl adipate	DIOA		
Diisooctyl phthalate	DIOP		
Diisopentyl phthalate	DIPP		
Diisotridecyl phthalate	DITDP		
Dimethyl phthalate	DMP		
Dinonyl phthalate	DNP		
Dioctyl adipate	DOA		
Dioctyl azelate	DOZ		
Dioctyl isophthalate (di-2-ethylhexyl isophthalate)	DOIP		
Dioctyl phthalate	DOP		
Dioctyl sebacate	DOS		
Dioctyl terephthalate (di-2-ethylhexyl terephthalate)	DOTP		
Diphenyl octyl phosphate	DPOF		
Diphenyl cresyl phosphate	DPCF		
Diphenyl 2-ethylhexyl phosphate	DPOF		

4.4 Monomers:

Term	Abbreviated Term
Allyl diglycol carbonate	ADC
Chlorotrifluoroethylene	CTFE
Diallyl chlorendate (diallyl ester of 1,4,5,6,7,7-hexachlorobicyclo-(2,2,1)-5-heptene-2,3-dicarboxylic acid)	DAC
Diallyl fumarate	DAF
Diallyl isophthalate	DAIP
Diallyl maleate	DAM
Diallyl phthalate (diallyl orthophthalate)	DAP
Methyl methacrylate	MMA
Tetrafluoroethylene	TFE
Triallyl cyanurate	TAC

4.5 Miscellaneous Plastics Terms:

Term	Abbreviated Term
General purpose	GP
Single stage	SS

NOTE 3—When listing one or more components, the order preferably should be in decreasing amount by mass. There are situations, however, where long standing usage indicates that this recommendation should not be followed. An example is ETFE.

5. Full List by Term and Abbreviated Term

Term	Abbreviated Term
Acrylonitrile-butadiene-acrylate plastics+poly(methyl methacrylate)	ABA+PMMA
Acrylonitrile-butadiene-acrylate plastics+poly(vinyl chloride)	ABA+PVC
Acrylonitrile-butadiene-acrylate plastics+polycarbonate	ABA+PC
Acrylonitrile-butadiene-acrylate plastics	ABA
Acrylonitrile-butadiene-styrene plastics+poly(vinyl chloride)	ABS+PVC
Acrylonitrile-butadiene-styrene plastics+polyphenylene sulfone	ABS+PPSU
Acrylonitrile-butadiene-styrene plastics+polytetrafluoroethylene	ABS+PTFE

Term	Abbreviated Term	Term	Abbreviated Term
Acrylonitrile-butadiene-styrene plastics+styrene maleic anhydride	ABS+SMA	Diocetyl isophthalate (di-2-ethylhexyl isophthalate)	DOIP
Acrylonitrile-butadiene-styrene plastics+thermoplastic polyurethane	ABS+TPU	Diocetyl phthalate	DOP
Acrylonitrile-butadiene plastics	AB	Diocetyl sebacate	DOS
Acrylonitrile-butadiene-styrene plastics+polyamide	ABS+PA	Diocetyl terephthalate (di-2-ethylhexyl terephthalate)	DOTP
Acrylonitrile-butadiene-styrene plastics+polycarbonate	ABS+PC	Diphenyl 2-ethylhexyl phosphate	DPOF
Acrylonitrile-chlorinated polyethylene-styrene plastics	ACPES	Diphenyl cresyl phosphate	DPCF
Acrylonitrile-ethylene-styrene plastics	AES	Diphenyl octyl phosphate	DPOF
Acrylonitrile-methyl acrylate-acrylonitrile-butadiene rubber	AMAB	Diundecyl phthalate	DUP
Acrylonitrile-methyl methacrylate plastics	AMMA	Epoxidized linseed oil	ELO
Acrylonitrile-styrene-acrylate plastics+poly(methyl methacrylate)	ASA+PMMA	Epoxidized soya bean oil	ESO
Acrylonitrile-styrene-acrylate plastics+poly(vinyl chloride)	ASA+PVC	Epoxy, epoxide	EP
Acrylonitrile-styrene-acrylate plastics	ASA	Ethyl cellulose	EC
Acrylonitrile-styrene-acrylate plastics+polycarbonate	ASA+PC	Ethylene-chlorotrifluoroethylene copolymer	E-CTFE
Acrylonitrile/ethylene-propylene-diene/styrene plastics	AEPDMS	Ethylene-ethyl acrylate plastics	EEA
Alkylsulfonic acid ester	ASE	Ethylene-methacrylic acid plastics	EMA
Allyl diglycol carbonate	ADC	Ethylene-propylene polymer	EPM
Aromatic polyester	ARP	Ethylene-propylene-diene plastics	EPD
		Ethylene-tetrafluoroethylene copolymer	ETFE
		Ethylene-vinyl acetate plastics	EVA
		Ethylene-vinyl alcohol copolymer	EVOH
Benzyl butyl phthalate	BBP	Fluorocarbon perfluoromethoxy	MPA
Benzyl octyl adipate (benzyl 2-ethylhexyl adipate)	BOA	Fully crosslinked elastomeric alloy	FCEA
Benzyl octyl phthalate (benzyl 2-ethylhexyl phthalate)	BOP	Furan-formaldehyde resin	FF
		General purpose	GP
Carboxymethyl cellulose	CMC		
Casein	CS	Heptyl nonyl undecyl adipate	HNUA
Caseine-formaldehyde resin	CSF	Heptyl nonyl undecyl phthalate	HNUP
Cellulose acetate	CA	Hexyl octyl decyl adipate	HXODA
Cellulose acetate-butyrate	CAB	Hexyl octyl decyl phthalate	HXODP
Cellulose acetate-propionate	CAP	High density polyethylene plastics	HDPE
Cellulose formaldehyde	CEF	High impact-resistant polystyrene	HIPS
Cellulose nitrate	CN		
Cellulose plastics, general	CE	Impact resistant polystyrene	IPS
Cellulose propionate	CP		
Cellulose triacetate	CTA	Linear low density polyethylene plastics	LLDPE
Chlorinated poly(vinyl chloride)	CPVC	Linear medium density polyethylene plastics	LDPE
Chlorinated polyethylene	CPE	Liquid crystal polymer	LCP
Chlorotrifluoroethylene	CTFE	Low density polyethylene plastics	LDPE
Cresol-formaldehyde resin	CF		
		Medium density polyethylene plastics	MDPE
Di-n-octyl phthalate	DNOP	Melamine-formaldehyde resin	MF
Diallyl chlorendate (diallyl ester of 1,4,5,6,7,7-hexachloro-bicyclo-(2,2,1)-5-heptene-2,3-dicarboxylic acid)	DAC	Melamine/phenol-formaldehyde resin	MPF
Diallyl fumarate	DAF	Methacrylate-butadiene-styrene plastics	MBS
Diallyl isophthalate	DAIP	Methyl cellulose	MC
Diallyl maleate	DAM	Methyl methacrylate	MMA
Diallyl phthalate (diallyl orthophthalate)	DAP	Methyl methacrylate-acrylonitrile-butadiene-styrene resin	MMABS
Dibutyl phthalate	DBP		
Dibutyl sebacate	DBS	n-Octyl decyl trimellitate	ODTM
Dicapryl phthalate	DCP	Nonyl undecyl adipate	NUA
Dicyclohexyl phthalate	DCHP	Nonyl undecyl phthalate	NUP
Didecyl phthalate	DDP	Nylon (See also <i>polyamide</i>)	PA
Diethyl phthalate	DEP		
Diheptyl phthalate	DHP	Octyl decyl adipate	ODA
Dihexyl phthalate	DHXP	Octyl decyl phthalate	ODP
Diisobutyl phthalate	DIBP		
Diisodecyl adipate	DIDA	Perfluoro(alkoxy alkane)	PFA
Diisodecyl phthalate	DIDP	Perfluoro(ethylene-propylene) copolymer	FEP
Diisohexyl phthalate	DIHP	Perfluoromethoxy resin	MFA
Diisononyl adipate	DIHXP	Phenol-formaldehyde resin	PF
Diisononyl phthalate	DINA	Phenol-furfural resin	PFF
Diisooctyl adipate	DINP	Poly(acrylic acid)	PAA
Diisooctyl phthalate	DIOA	Poly(allyl diglycol carbonate)	PADC
Diisopentyl phthalate	DIOP	Poly(aryl ether ketone)	PAEK
Diisotridecyl phthalate	DIPP	Poly(butyl acrylate)	PBA
Dimethyl phthalate	DITDP	Poly(butylene terephthalate)	PBT
Dinonyl phthalate	DMP	Poly(butylene terephthalate)+poly(ethylene terephthalate)	PBT+PET ⁵
Diocetyl adipate	DNP	Poly(butylene terephthalate)+poly(phenylene ether)	PBT+PPE
Diocetyl azelate	DOA	Poly(butylene terephthalate)+rubber	PBT+RBR
	DOZ		

Term	Abbreviated Term	Term	Abbreviated Term
Poly(cyclohexylenedimethylene cyclohexandicarboxylate), glycol and acid comonomer	PCCE	Polybutene-1	PB
Poly(cyclohexylenedimethylene terephthalate)	PCT	Polycarbonate	PC
Poly(cyclohexylenedimethylene terephthalate), acid comonomer	PCTA	Polycarbonate+poly(butylene terephthalate)	PC+PBT
Poly(cyclohexylenedimethylene terephthalate), glycol	PCTG	Polycarbonate+poly(ethylene terephthalate)	PC+PC+PET ⁵
Poly(diallyl phthalate)	PDAP	Polycarbonate+polyethylene	PC+PE
Poly(ester urethane)	PAUR	Polycarbonate+styrene-maleic anhydride	PC+SMA
Poly(ether block amide)	PEBA	Polycarbonate+thermoplastic polyurethane	PC+TPU
Poly(ether sulfone)	PESU	Polychlorotrifluoroethylene	PCTFE
Poly(ether urethane)	PEUR	Polyester alkyl (or polyacrylate)	PAK
Poly(ethylene naphthalate)	PEN	Polyester, thermoplastic; polyarylate [poly(aryl terephthalate)]—liquid crystal polymer	PAT
Poly(ethylene oxide)	PEOX	Polyetheretherketone	PEEK
Poly(ethylene terephthalate)	PET ⁵	Polyetheretherketoneketone	PEEKK
Poly(ethylene terephthalate)+poly(methyl methacrylate)	PET ⁵ +PMMA	Polyetherketoneetherketoneketone	PEKEKK
Poly(ethylene terephthalate)+poly(phenylene sulfone)	PET ⁵ +PPSU	Polyetherketoneketone	PEKK
Poly(ethylene terephthalate), glycol comonomer	PET ⁵ +RBR	Polyetherizimide	PEI
Poly(lactic acid)	PETG	Polyetherketone	PEK
Poly(methyl methacrylate)	PLA	Polyethylene	PE
Poly(methyl methacrylimide)	PMMA	Polyhydroxy butyrate	PHB
Poly(methyl- α -chloroacrylate)	PMMI	Polyhydroxy butyrate-polyhydroxy valerate	PHBV
Poly(phenyl sulfone)	PMCA	Polyimide	PI
Poly(phenylene ether) (or poly(phenylene oxide), a deprecated term)	PPSU	Polyimidesulfone	PISU
Poly(phenylene ether)+impact resistant polystyrene	PPE	Polyisobutylene	PIB
Poly(phenylene sulfide)	PPE+IPS	Polyisocyanurate	PIR
Poly(phenylene sulfide)+polytetrafluoroethylene	PPS	Polyketone	PK
Poly(phenylene sulfone)	PPS+PTFE	Polymethacrylimide	PMI
Poly(propylene oxide)	PPSU	Polyoxymethylene+polytetrafluoroethylene	POM+PTFE
Poly(vinyl acetate)	PPOX	Polyoxymethylene+rubber	POM+RBR
Poly(vinyl alcohol)	PVAC	Polyoxymethylene, polyacetal	POM
Poly(vinyl butyral)	PVOH	Polyphenylene	PPH
Poly(vinyl carbazole)	PVB	Polyphthalamide	PPA
Poly(vinyl chloride)	PVK	Polypyrrolene	PP
Poly(vinyl chloride)+chlorinated polyethylene	PVC	Polystyrene	PS
Poly(vinyl chloride)+nitrile-butadiene rubber	PVC+CPE	Polysulfone	PSU
Poly(vinyl chloride)+poly(methyl methacrylate)	PVC+NBR	Polytetrafluoroethylene	PTFE
Poly(vinyl chloride) plastics+polyurethane	PVC+PMMA	Polyurethane	PUR
Poly(vinyl chloride-acetate)	PVC+PUR	Polyurethane+polyisocyanate	PUR+PIR
Poly(vinyl fluoride)	PVCA		
Poly(vinyl formal)	PVF	Saturated polyester plastic	SP
Poly(vinyl pyrrolidone)	PVFM	See TCF	TTP
Poly(vinylidene chloride)	PVP	Silicone plastics	SI
Poly(vinylidene fluoride)	PVDC	Single stage	SS
Poly(ϵ -caprolactone)	PVDF	Styrene- α -methylstyrene plastic	SMS
Poly-4-methyl pentene-1	PCL	Styrene-acrylonitrile plastic	SAN
Poly- α -methylstyrene	PMP	Styrene-butadiene plastics	SB
Poly-p-oxybenzoate	PMS	Styrene-butadiene-styrene block copolymer	SBS
Polyacrylonitrile	POB	Styrene-ethylene/butylene-styrene block copolymer	SEBS
Polyamide (amorphous) blend	PAN	Styrene-ethylene/propylene-styrene block copolymer	SEPS
Polyamide (nylon)	PA +	Styrene-isoprene-styrene block copolymer	SIS
Polyamide 11	PA	Styrene-maleic anhydride plastics+impact resistant polystyrene	SMA+IPS
Polyamide 12	PA11	Styrene-maleic anhydride plastics	S/MA
Polyamide 1212	PA12		SRP
Polyamide 46	PA1212	Tetrafluoroethylene	TFE
Polyamide 6	PA46	Tetraoctyl pyromellitate (tetra-2-ethylhexyl pyromellitate)	TOPM
Polyamide 610	PA6	Thermoplastic elastomer	TPE
Polyamide 612	PA610	Thermoplastic elastomer, ether-ester	TEEE
Polyamide 66	PA612	Thermoplastic elastomer, fully crosslinked elastomer alloy	FCEA
Polyamide 69	PA66	Thermoplastic elastomer, highly crosslinked thermoplastic vulcanizate	HCTPV
Polyamide plastics+ethylene-methacrylic acid (ionomer)	PA69	Thermoplastic elastomer, olefinic	
Polyamide+poly(phenylene ether)	PA+EMA	Thermoplastic elastomer, polyether block amide	TEO
Polyamide+polyethylene	PA+PPE	Thermoplastic elastomer, styrenic	PEBA
Polyamide+rubber	PA+PE	Thermoplastic elastomer styrenic, saturated	TES
Polyamide+styrene-acrylonitrile plastics	PA+RBR	Thermoplastic elastomer styrenic, unsaturated	TESS
Polyamide-imide	PA+SAN	Thermoplastic elastomer-chlorinated ethylene alloy	TESU
Polyarylate	PAI	Thermoplastic polyester	TECEA
Polyaryl amide	PAR	Thermoplastic polyester:	TPES
Polyarylether	PARA	Copolyester [poly(aryl terephthalate)]	ARP
Polyarylsulfone	PAE	Polyarylate [poly(aryl terephthalate)]—liquid crystal polymer	PAT
Polybutadiene-acrylonitrile	PASU		
Polybutadiene-styrene	PBAN	Thermoplastic polyurethane	TPU
	PBS	Thermoplastic polyurethane, reinforced	RTPU

Term	Abbreviated Term	Abbreviated Term	Term
Thermoset polyurethane	TSPU	CTA	Cellulose triacetate
Triallyl cyanurate	TAC	CTFE	Chlorotrifluoroethylene
Trichlorethyl phosphate	TCEF		
Tricresyl phosphate (or tritolyl phosphate)	TCF	DAC	Diallyl chlorendate (diallyl ester of 1,4,5,6,7,7-hexachlorobicyclo- (2,2,1)-5-heptene-2,3-dicarboxylic acid)
Triheptyl trimellitate	THTM		Diallyl fumarate
Triisooctyl trimellitate	TIOTM	DAF	Diallyl isophthalate
Trioctyl phosphate	TOF	DAIP	Diallyl maleate
Trioctyl trimellitate (tri-2-ethylhexyl trimellitate)	TOTM	DAM	Diallyl phthalate (diallyl orthophthalate)
Triphenyl phosphate	TPP	DAP	Dibutyl phthalate
Trixylyl phosphate	TXF	DBP	Dibutyl sebacate
		DBS	Dicyclohexyl phthalate
Ultra-high molecular weight polyethylene	UHMWPE	DCHP	Dicapryl phthalate
Unsaturated polyester	UP	DCP	Didecyl phthalate
Urea-formaldehyde resin	UF	DDP	Diethyl phthalate
		DEP	Diheptyl phthalate
Vinyl chloride-ethylene resin	VCE	DHP	Dihexyl phthalate
Vinyl chloride-ethylene-methyl acrylate resin	VCEMA	DHXP	Diisobutyl phthalate
Vinyl chloride-ethylene-vinyl acetate resin	VCEVAC	DIBP	Diisodecyl adipate
Vinyl chloride-methyl acrylate resin	VCMA	DIDA	Diisodecyl phthalate
Vinyl chloride-methyl methacrylate resin	VCMMA	DIDP	Diisooheptyl phthalate
Vinyl chloride-octyl acrylate resin	VCOA	DIHP	Diisohexyl phthalate
Vinyl chloride-vinyl acetate resin	VCVAC	DIHXP	Diisononyl adipate
Vinyl chloride-vinylidene chloride resin	VCVDC	DINA	Diisononyl phthalate
Vinylidene fluoride	VDF	DINP	Diisooctyl adipate
		DIOA	Diisooctyl phthalate
		DIOP	Diisopentyl phthalate
		DIPP	Diisotridecyl phthalate
		DITDP	Di-n-octyl phthalate
		DNOP	Dinonyl phthalate
		DNP	Dioctyl adipate (di-2-ethylhexyl adipate)
		DOA	Dioctyl isophthalate (di-2-ethylhexyl isophthalate)
		DOIP	Dioctyl phthalate (di-2-ethylhexyl phthalate)
		DOP	Dioctyl sebacate (di-2-ethylhexyl sebacate)
		DOS	Dioctyl terephthalate (di-2-ethylhexyl terephthalate)
		DOTP	Dioctyl azelate (di-2-ethylhexyl azelate)
		DOZ	Diphenyl cresyl phosphate
		DPCF	Diphenyl 2-ethylhexyl phosphate
		DPOF	Diphenyl octyl phosphate
		DPOF	Diundecyl phthalate
		DUP	
		EC	Ethyl cellulose
		E-CTFE	Ethylene-chlorotrifluoroethylene copolymer
		EEA	Ethylene-ethyl acrylate plastics
		ELO	Epoxidized linseed oil
		EMA	Ethylene-methacrylic acid plastics
		EP	Epoxy, epoxide
		EPD	Ethylene-propylene-diene plastics
		EPM	Ethylene-propylene polymer
		ESO	Epoxidized soya bean oil
		ETFE	Ethylene-tetrafluoroethylene copolymer
		EVA	Ethylene-vinyl acetate plastics
		EVOH	Ethylene-vinyl alcohol copolymer
		FCEA	Thermoplastic elastomer, fully crosslinked elastomer alloy
		FEP	Perfluoro(ethylene-propylene) copolymer
		FF	Furan-formaldehyde resin
		GP	General purpose
		HCTPV	Thermoplastic elastomer, highly crosslinked thermoplastic vulcanizate
		HDPE	High-density polyethylene plastics
		HIPS	High impact-resistant polystyrene
		HNUA	Heptyl nonyl undecyl adipate
		HNUP	Heptyl nonyl undecyl phthalate
		HXODA	Hexyl octyl decyl adipate
		HXODP	Hexyl octyl decyl phthalate
		IPS	Impact-resistant polystyrene
		LCP	Liquid crystal polymer
		LDPE	Low density polyethylene plastics

6. Full List by Abbreviated Term

Abbreviated Term	Term
AB	Acrylonitrile/butadiene plastics
ABA	Acrylonitrile-butadiene-acrylate plastics
ABA+PC	Acrylonitrile-butadiene-acrylate+polycarbonate
ABA+PMMA	Acrylonitrile-butadiene-acrylate+poly(methyl methacrylate)
ABA+PVC	Acrylonitrile-butadiene-acrylate+poly(vinyl chloride)
ABS	Acrylonitrile-butadiene-styrene plastics
ABS+PA	Acrylonitrile-butadiene-styrene plastics+polyamide
ABS+PC	Acrylonitrile-butadiene-styrene plastics+polycarbonate
ABS+PPSU	Acrylonitrile-butadiene-styrene+polyphenylene sulfone
ABS+PTFE	Acrylonitrile-butadiene-styrene+polytetrafluoroethylene
ABS+PVC	Acrylonitrile-butadiene-styrene+poly(vinyl chloride)
ABS+SMA	Acrylonitrile-butadiene-styrene+styrene maleic anhydride
ABS+TPU	Acrylonitrile-butadiene-styrene+thermoplastic polyurethane
ACPES	Acrylonitrile-chlorinated polyethylene-styrene plastics
ADC	Allyl diglycol carbonate
AEPDMS	Acrylonitrile/ethylene-propylene-diene/styrene plastics
AES	Acrylonitrile-ethylene-styrene plastics
AMMA	Acrylonitrile-methyl methacrylate plastics
ARP	Aromatic polyester
ARP	Thermoplastic polyester, (polyaryl terephthalate)
ASA	Acrylonitrile-styrene-acrylate plastics
ASA+PC	Acrylonitrile-styrene-acrylate plastics+polycarbonate
ASA+PMMA	Acrylonitrile-styrene-acrylate+poly(methyl methacrylate)
ASA+PVC	Acrylonitrile-styrene-acrylate+poly(vinyl chloride)
ASE	Alkylsulfonic acid ester
BBP	Benzyl butyl phthalate
BOA	Benzyl octyl adipate (benzyl 2-ethylhexyl adipate)
BOP	Benzyl octyl phthalate (benzyl 2-ethylhexyl phthalate)
CA	Cellulose acetate
CAB	Cellulose acetate-butyrate
CAP	Cellulose acetate-propionate
CE	Cellulose plastics, general
CEF	Cellulose formaldehyde
CF	Cresol-formaldehyde resin
CMC	Carboxymethyl cellulose
CN	Cellulose nitrate
CP	Cellulose propionate
CPE	Chlorinated polyethylene
CPVC	Chlorinated poly(vinyl chloride)
CS	Casein
CSF	Caseine-formaldehyde resin

Abbreviated Term	Term	Abbreviated Term	Term
LLDPE	Linear low density polyethylene plastics	PEBA	Thermoplastic elastomer, polyether block amide
LMDPE	Linear medium density polyethylene plastics	PEBA	Poly(ether block amide)
		PEEK	Polyetheretherketone
MBS	Methacrylate-butadiene-styrene plastics	PEEKK	Polyetheretherketoneketone
MC	Methyl cellulose	PEI	Polyetherimide
MDPE	Medium density polyethylene plastics	PEK	Polyetherketone
MF	Melamine-formaldehyde resin	PEKEKK	Polyetherketonetherketoneketone
MFA	Perfluoromethoxy resin	PEKK	Polyetherketoneketone
MMA	Methyl methacrylate	PEN	Poly(ethylene naphthalate)
MMABS	Methyl methacrylate-acrylonitrile-butadiene-styrene resin	PEOX	Poly(ethylene oxide)
		PESU	Poly(ether sulfone)
MPA	Fluorocarbon perfluoromethoxy	PET ⁵	Poly(ethylene terephthalate)
MPF	Melamine/phenol-formaldehyde resin	PET ⁵	Poly(ethylene terephthalate)+poly(methyl methacrylate)+PMMA
		PET ⁵ +PPSU	Poly(ethylene terephthalate)+poly(phenylene sulfone)
NUA	Nonyl undecyl adipate	PET ⁵ +RBR	Poly(ethylene terephthalate)+rubber
NUP	Nonyl undecyl phthalate	PETG	Poly(ethylene terephthalate) glycol comonomer
		PEUR	Poly(ether urethane)
ODA	Octyl decyl adipate	PF	Phenol-formaldehyde resin
ODP	Octyl decyl phthalate	PFA	Perfluoro(alkoxy alkane)
ODTM	<i>n</i> -Octyl decyl trimellitate	PFF	Phenol-furfural resin
		PHB	Polyhydroxy butyrate
PA	Polyamide (nylon)	PHBV	Polyhydroxy butyrate-polyhydroxy valerate
PA	Nylon (see also polyamide)	PI	Polyimide
PA11	Polyamide 11	PIB	Polyisobutylene
PA12	Polyamide 12	PIR	Polyisocyanurate
PA1212	Polyamide 1212	PISU	Polyimidesulfone
PA46	Polyamide 46	PK	Polyketone
PA6	Polyamide 6	PLA	Poly(lactic acid)
PA610	Polyamide 610	PMCA	Poly(methyl- α -chloroacrylate)
PA612	Polyamide 612	PMI	Polymethacrylimide
PA66	Polyamide 66	PMMA	Poly(methyl methacrylate)
PA69	Polyamide 69	PMMI	Poly(methyl methacrylimide)
PA+	Polyamide (amorphous) blend	PMP	Poly-4-methylpentene-1
PA+EMA	Polyamide plastics+ethylene-methacrylic acid (ionomer)	PMS	Poly- α -methylstyrene
		POB	Poly-p-oxybenzoate
PA+RE	Polyamide+polyethylene	POM	Polyoxymethylene, polyacetal
PA+PPE	Polyamide+poly(phenylene ether)	POM+PTFE	Polyoxymethylene+polytetrafluoroethylene
PA+RBR	Polyamide+rubber	POM+RBR	Polyoxymethylene+rubber
PA+SAN	Polyamide+styrene-acrylonitrile	PP	Polypropylene
PAA	Poly(acrylic acid)	PPA	Polyphthalamide
PADC	Poly(allyl diglycol carbonate)	PPE	Poly(phenylene ether) (or poly(phenylene oxide), a deprecated term)
PAE	Polyarylether ketone)		
PAI	Polyamide-imide	PPE+IPS	Poly(phenylene ether)+impact-resistant polystyrene
PAK	Polyester alkyd (or polyacrylate)	PPH	Polyphenylene
PAN	Polyacrylonitrile	PPOX	Poly(propylene oxide)
PAR	Polyarylate	PPS	Poly(phenylene sulfide)
PARA	Polyaryl amide	PPSU	Poly(phenyl sulfone)
PASU	Polyarylsulfone	PPS+PTFE	Poly(phenylene sulfide)+polytetrafluoroethylene
PAT	Polyester, thermoplastic; polyarylate [poly(aryl terephthalate)]	PS	Polystyrene
PAUR	Poly(ester urethane)	PSU	Polysulfone
PB	Polybutene-1	PTFE	Polytetrafluoroethylene
PBA	Poly(butyl acrylate)	PUR	Polyurethane
PBAN	Polybutadiene-acrylonitrile	PUR+PIR	Polyurethane+polyisocyanate
PBS	Polybutadiene-styrene	PVAC	Poly(vinyl acetate)
PBT	Poly(butylene terephthalate)	PVOH	Poly(vinyl alcohol)
PBT+PET ⁵	Poly(butylene terephthalate)+poly(ethylene terephthalate)	PVB	Poly(vinyl butyral)
		PVC	Poly(vinyl chloride)
PBT+PPE	Poly(butylene terephthalate)+poly(phenylene ether)	PVC+CPE	Poly(vinyl chloride)+chlorinated polyethylene
PBT+RBR	Poly(butylene terephthalate)+rubber	PVC+NBR	Poly(vinyl chloride)+nitrile-butadiene rubber
PC	Polycarbonate	PVC+PMMA	Poly(vinyl chloride)+poly(methyl methacrylate)
PC+PBT	Polycarbonate+poly(butylene terephthalate)	PVC+PUR	Poly(vinyl chloride) plastics+polyurethane
PC+PE	Polycarbonate+polyethylene	PVCA	Poly(vinyl chloride-acetate)
PC+PET ⁵	Polycarbonate+poly(ethylene terephthalate)	PVDC	Poly(vinylidene chloride)
PC+SMA	Polycarbonate+styrene-maleic anhydride	PVDF	Poly(vinylidene fluoride)
PC+TPU	Polycarbonate+thermoplastic polyurethane	PVF	Poly(vinyl fluoride)
PCCE	Poly(cyclohexylenedimethylene cyclohexandicarboxylate), glycol and acid comonomer	PVFM	Poly(vinyl formal)
		PVK	Poly(vinyl carbazole)
PCL	Poly(ϵ -caprolactone)	PVP	Poly(vinyl pyrrolidone)
PCT	Poly(cyclohexylenedimethylene terephthalate)		
PCTA	Poly(cyclohexylenedimethylene terephthalate), cid comonomer	RTPU	Thermoplastic polyurethane, reinforced
PCTFE	Polychlorotrifluoroethylene		
PCTG	Poly(cyclohexylenedimethylene terephthalate), glycol	S/MA	Styrene-maleic anhydride plastics
PDAP	Poly(diallyl phthalate)	SAN	Styrene-acrylonitrile plastic
PE	Polyethylene	SB	Styrene-butadiene plastics

Abbreviated Term	Term		
SBS	Styrene-butadiene-styrene block copolymer	19	polybrominated diphenylether in combination with antimony compounds
SEBS	Styrene-ethylene/butylene-styrene block copolymer	20	polybrominated biphenyls
SEPS	Styrene-ethylene/propylene-styrene block copolymer	21	polybrominated biphenyls in combination with antimony compounds
SI	Silicone plastics	22 to 24	not allocated
SIS	Styrene-isoprene-styrene block copolymer	25	aliphatic fluorinated compounds
SMA+IPS	Styrene-maleic anhydride+impact-resistant polystyrene	26 to 29	not allocated
SMS	Styrene- α -methylstyrene plastic		
SP	Saturated polyester plastic		
SRP	Styrene-rubber plastics		
SS	Single stage		
TAC	Triallyl cyanurate		
TCEF	Trichloroethyl phosphate		
TCF	Tricresyl phosphate (or tritolyol phosphate)		
TECEA	Thermoplastic elastomer-chlorinated ethylene alloy		
TEEE	Thermoplastic elastomer, ether-ester		
TEO	Thermoplastic elastomer, olefinic		
TES	Thermoplastic elastomer, styrenic		
TESS	Thermoplastic elastomer styrenic, saturated		
TESU	Thermoplastic elastomer styrenic, unsaturated		
TFE	Tetrafluoroethylene		
THTM	Triheptyl trimellitate		
TIOTM	Triisooctyl trimellitate		
TOF	Trioctyl phosphate		
TOPM	Tetraoctyl pyromellitate (tetra-2-ethylhexyl pyromellitate)		
TOTM	Trioctyl trimellitate (tri-2-ethylhexyl trimellitate)		
TPE	Thermoplastic elastomer		
TPES	Thermoplastic polyester		
TPP	Triphenyl phosphate		
TPU	Thermoplastic polyurethane		
TSPU	Thermoset polyurethane		
TXF	Trixylyl phosphate		
UF	Urea-formaldehyde resin		
UHMWPE	Ultra-high molecular weight polyethylene		
UP	Unsaturated polyester		
VCE	Vinyl chloride-ethylene resin		
VCEMA	Vinyl chloride-ethylene-methyl acrylate resin		
VCEVAC	Vinyl chloride-ethylene-vinyl acetate resin		
VCMA	Vinyl chloride-methyl acrylate resin		
VCMAA	Vinyl chloride-methyl methacrylate resin		
VCOA	Vinyl chloride-octyl acrylate resin		
VCVAC	Vinyl chloride-vinyl acetate resin		
VCVDC	Vinyl chloride-vinylidene chloride resin		
VDF	Vinylidene fluoride		

7. Code Numbers for Identifying Flame Retardant Compounds

7.1 The code numbers are grouped according to the chemical composition of the flame retardant.

7.1.1 Halogenated Compounds:

7.1.1.1 In compounds containing both aliphatic/alicyclic and aromatic groups, the group containing the halogen determines the code to be used.

Code	Compound
10	aliphatic/alicyclic chlorinated compounds
11	aliphatic/alicyclic chlorinated compounds in combination with antimony compounds
12	aromatic chlorinated compounds
13	aromatic chlorinated compounds in combination with antimony compounds
14	aliphatic/alicyclic brominated compounds
15	aliphatic/alicyclic brominated compounds in combination with antimony compounds
16	aromatic brominated compounds (excluding brominated diphenylether and biphenyls)
17	aromatic brominated compounds (excluding brominated diphenylether and biphenyls) in combination with antimony compounds
18	polybrominated diphenylether

7.2 Nitrogen Compounds:

Code	Compound
30	nitrogen compounds (including but not limited to melamine, melamine cyanurate, urea)
31 to 39	not allocated

7.3 Organic Phosphorus Compounds:

Code	Compound
40	halogen free organic phosphorous compounds
41	chlorinated organic phosphorus compounds
42	brominated organic phosphorus compounds
43 to 49	not allocated

7.4 Inorganic Phosphorus Compounds:

Code	Compound
50	ammonium orthophosphates
51	ammonium polyphosphates
52	red phosphorus
53 to 59	not allocated

7.5 Metallic Oxides, Hydroxides, and Salts:

Code	Compound
60	aluminum hydroxide
61	magnesium hydroxide
62	antimony (III)-oxide
63	alkali antimonate
64	magnesium/calcium carbonate-hydrate
65 to 69	not allocated

7.6 Boron and Zinc Compounds:

Code	Compound
70	inorganic boron compounds (excluding zinc borate)
71	organic boron compounds
72	zinc borate
73	inorganic zinc compounds (excluding zinc borate)
74	not allocated

7.7 Silica Compounds:

Code	Compound
75	inorganic silica compounds
76	organic silica compounds
77 to 79	not allocated

7.8 Miscellaneous Compounds:

Code	Compound
80	graphite
81 to 89	not allocated
90 to 99	not allocated

8. Use of Abbreviated Terms

8.1 When abbreviated terms are used in publications or other written matter, their first occurrence in the text should be enclosed in parentheses and preceded by the written word or words being abbreviated. Subsequent references to such words in the article can then be made using the abbreviated term. For example, if one wishes to use PET⁵ as the acronym for poly(ethylene terephthalate), wording such as the following would be acceptable: “Poly(ethylene terephthalate) (PET⁵) is a crystalline plastic. PET⁵ offers many advantages in such articles as soft drink bottles.”

8.2 Additional information on use of abbreviated terms, symbols and codes for flame retardants is included in Guide **D1972**.

9. Keywords

9.1 abbreviated terms; code numbers; flame retardants; monomers; plastic blends and alloys; plastics; plasticizers; terminology symbols

APPENDIX

(Nonmandatory Information)

X1. A SUGGESTED SYSTEM FOR PREPARING ABBREVIATED TERMS FOR PLASTICS AND RELATED TERMS⁵

NOTE X1.1—The use of the following guide in establishing abbreviated terms for plastics and related terms will promote uniform and systematic standardization.⁶

X1.1 Use upper case letters for the main components in the order in which they occur in the plastics term for which an abbreviated term is being established, for example:

Poly(vinyl chloride) = PVC

X1.2 Use generic terms for family designations, for example:

nylon for polyamide plastics

X1.3 Use figures and letters to distinguish among plastics prepared from various condensation units in a homologous series, for example:

Poly(hexamethylene sebacamide) = PA 610 where, with aliphatic components, the first number(s) refers to the number of carbon atoms in the diamine and the second number(s) refers to the number of carbon atoms in the diacid. It is the convention

not to use any separator, such as a comma, dash, or virgule (solidus,/), between the numbers. In these systems there is no confusion when the separator is not used. With alicyclic or aromatic diamines or diacids, a letter acronym is usually used. For example:

meta – phenylene diamine = MPD

terephthalic acid = T

isophthalic acid = I

X1.4 The components in copolymers are separated by hyphens “-” in the term, but usually no separation is required in the abbreviated term. In cases where use of the hyphen may cause confusion, it is acceptable to use a virgule, “/”, as the separator. The virgule also is correctly termed a solidus and often, incorrectly, referred to as a “slash” or “diagonal.”

X1.5 The components in blends of polymers are separated by a plus sign, “+”, in both the term and the abbreviated term.

X1.6 A more elaborate system for developing abbreviated terms for plastics and related materials has been standardized by ISO in ISO 1043.

⁶ Based in part on Proposals under Consideration by the Division of Plastics and High Polymers, IUPAC.

SUMMARY OF CHANGES

Committee D20 has identified the location of selected changes to this standard since the last issue (D1600 - 08) that may impact the use of this standard. (April 15, 2013)

(1) Added new abbreviation for poly(lactic acid) to 4.1.

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