

***ENCYCLOPEDIA OF PLASTICS,
POLYMERS, AND
RESINS***

VOLUME I

Compiled by

Michael and Irene Ash

***Chemical Publishing Co.
New York, N.Y.***

Encyclopedia of Plastics, Polymers, and Resins Volume 1

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PREFACE

This encyclopedia is an attempt to coordinate and unify practical information on plastic, polymer, and resin trademark products. These categories overlap, i.e., plastics are a subset of polymers, and resins are often, but not always, polymers. However, it has been our aim to give the user of this compilation fingertip availability to a large quantity of essential information about these products. This three-volume compendium has been made possible through the cooperation of the major national and international plastic, polymer, and resin manufacturers.

The information provided here has been gleaned from thousands of brochures, technical bulletins, and data sheets, but the extent of the information provided for each product has been limited by the amount of data given to us by the manufacturers. Whenever possible and/or appropriate, we have given the chemical description, applications, form and color, general, mechanical, thermal, and electrical properties of each product.

With the state of technological growth in these industries constantly increasing, this encyclopedia should serve as an important tool for chemists, engineers, and salespeople here and abroad.

We want to extend our thanks to Roberta Dakan for her tireless efforts in helping make this encyclopedia as accurate and consistent as possible.

It should be noted that when the temperatures of properties such as viscosity, density, solubility, etc. are not included, a standard temperature of 25 C is to be assumed. The information in this publication is reliable to the best of our knowledge. We would appreciate being informed of any errors or omissions so that these can be integrated into subsequent editions of this encyclopedia.

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ABBREVIATIONS

@	at
ABS	acrylonitrile-butadiene-styrene
aq.	aqueous
ASTM	American Society for Testing Materials
avail	available
B.P.	boiling pt.
BS	British Standards
BS&D	backwashed, settled, and drained
Btu	British thermal unit
C	Centigrade
Cal	calories
cc	cubic centimeter
CC	closed cup
CD	cross direction
charact.	characteristics
chem.	chemical
cm	centimeter
COC	Cleveland Open Cup
coeff.	coefficient
comp.	compound
compr.	compressive
conc.	concentrated
conduct.	conductivity
const.	constant
cps	centipoise or cycles per second
defl. or deflect'n	deflection
dg.	decigram
dielec.	dielectric
DIN	Deutsche Industrie Normen
dissip.	dissipation
distort.	distortion
DMF	dimethylformamide
DOT	Department of Transportation
DWV	drain, waste, and vent
elec.	electrical
elong.	elongation

EPDM	ethylene propylene-diene monomer
esp.	especially
EVA	ethylene vinyl acetate
exp.	expansion
F	Fahrenheit
FAA	Federal Aviation Agency
FB	free base
FDA	Food and Drug Administration
flamm.	flammability
flex.	flexural
F.P.	freezing point
ft	foot
g	gram
G	giga
gal	gallon
gen'l.	general
gr.	gravity
GRP	glass-reinforced polyester
h	hour
HAF	high abrasion furnace carbon black
HB	horizontal burning
HC	hydrocarbon
hyd.	hydroxyl
hydrog.	hydrogenated
Hz	hertz
ICC	Interstate Commerce Commission
ignit.	ignition
in.	inch
incl.	including
insol.	insoluble
insul.	insulation
J	joule
k	kilo
kg.	kilogram
l.	liter
lb	pound
LDPE	low density polyethylene
m	milli or meter
M	mega
max.	maximum
MC	megacycle
MD	mold direction or machine direction

MDA	methylene disalicylic acid
mech.	mechanical
med.	medium
MEK	methyl ethyl ketone
mfg.	manufacturing
mg	milligram
MIBK	methyl isobutyl ketone
MIL	Military Specifications
min.	minute
min.	minimum or mineral
misc.	miscellaneous
mm.	millimeter
mo	months
MOCA	methylene-bis-ortho-chloroaniline
mod.	modulus
M.P.	melting point
m.w.	molecular weight
N	Newton
no.	number
NR	natural rubber
OC	open crucible
oz.	ounce
Pa.	Pascal
pbw	parts by weight
pcf	pounds per cubic foot
PET	polyethylene terephthalate
PMCC	Pensky-Martens Closed Cup
pH	hydrogen-ion concentration
phr	parts per hundred parts of resin or rubber
pkgs.	packages
PPD	piperidine pentamethylene dithiocarbamate
psi	pounds per square inch
pt.	point
PU	polyurethane
PVAc	polyvinyl acetate
PVC	polyvinyl chloride
PW	potable water
quat.	quaternary
qt.	quart
R&B	Ring & Ball
ref.	refractive or reference
resist.	resistance or resistivity

r.h.	relative humidity
rpm	revolutions per minute
R.T.	room temperature
s.	second
SAN	styrene-acrylonitrile polymer
sapon.	saponification
SBR	styrene-butadiene elastomer
soften.	softening
sol.	solubility or soluble
sol'n.	solution
sp.	specific
spec.	specification
SS	stainless steel
S/S	step by step
std.	standard
S/T	short time
str.	strength
surf.	surface
TCC	Taggart Closed Cup
TD	transverse direction
temp.	temperature
tens.	tensile
TDI	toluene diisocyanate
therm.	thermal
THF	tetrahydrofuran
TOC	Taggart Open Cup
trans.	transitional
UL	Underwriter's Laboratory
USDA	Unites States Department of Agriculture
uv.	ultraviolet
V	volt
visc.	viscosity
vol.	volume
W.E. or W. Elec.	Western Electric
wk	week
wt.	weight
ys	years
<	less than
>	greater than
≤	less than or equal to
≥	greater than or equal to
≈	approximately equal to

The following products which are included in this volume, are registered with the U.S. Patent Office.

Abalyn®	Dion®
Acrylite®	Drapex®
Acryloid®	Duolite®
Adiprene®	Durez®
Adtac®	Dymerex®
Advastab®	Eccosil®
Advawax®	Elvace®
A-Fax®	Elvanol®
Alathon®	Elvax®
Ameripol®	Emerex®
BCI®	Envex®
Butacite®	Epolene®
CAPA®	Epolite®
Carbopol®	Epotuf®
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Cycoloy®	Fosta-Tuf-Flex®
Cytor®	Gafite®
Daran®	Gantrez®
Daratak®	Geon®
Darex®	Good-rite®

A

Abalyn. Hercules Inc.

Chem. Descrip.: Methyl ester of rosin

Category/Applications: Resin with wide compatibility, excellent surface-wetting properties, viscosity, and tack for use in lacquers, inks, paper coatings, varnishes, adhesives, sealing compounds, plastics, wood preservatives, and perfumes

Form: Viscous liquid; Color: Amber

Gen'l. Prop.: Sol.: Sol. in esters, ketones, alcohols, ethers, coal tar, petroleum hydrocarbons, and veg. and min. oils; insol. in water; Sp. Gr.: 1.03; Density: 1.03 kg/l; Visc. (Gardner-Holdt): Z₁; B.P.: 352-356 C; Acid No.: 6; Sapon. No.: 160; Stability: Good thermal stability
Ref. Index: 1.5300 (20 C); Flash Pt.: 180 C (COC)

Std. Pkgs.: 205-kg metal drums (net), and in tank cars, tank trucks

Ref.: Product data No. 742-9

Abbey #100. Abbey Plastics Corp.

Chem. Descrip.: Conductive vinyl compound

Category/Applications: Thermoplastic material with outstanding electrical conductive properties for use in microphone cable, safety equipment, hospital O.R. equipment, test equipment, gasketing and tubing, radio, stereo, and TV cable, aircraft static eliminators, conductive

calendered sheeting and tapes, high voltage conductor shielding and corona barrier, antistatic devices, solvent solutions

Gen'l. Prop.: Sp. Gr.: 1.39

Mech. Prop.: Tens. Str.: 1500 psi; Tens. Elong.: 125%; Tens. Mod.: 1450 psi (@ 100% elong.); Hardness (Shore A): 88

Elect. Prop.: Vol. Resist.: 6 ohm/cm³

Abitol. Hercules Inc.

Chem. Descrip.: Primary, monohydric alcohol derived from hydrog. rosin acids

Category/Applications: Resinous plasticizer and tackifier in plastics, lacquers, inks, and adhesives; chemical intermediate in the production of oil-modified and oil-free alkyd resins

Form: Viscous liquid; Color: Colorless; Odor: Low

Composition: Avail. as viscous liquid (100% resin), and 90% solids toluene or xylene solutions

Gen'l. Prop.: Sol.: Sol. in alcohols, esters, ketones, chlorinated solvents, and in aliphatic, aromatic, or terpene hydrocarbons; insol. in water; Sp. Gr.: 1.008; Density: 8.4 lb/gal; Visc.: 400 poises (40 C); Acid No.: 0.3; Sapon. No.: 15; Hydroxyl: 4.75%; Stability: Resistant to oxidation; Ref. Index: 1.5262 (20 C); Flash Pt.: 185 C (COC)

Std. Pkgs.: 208- ℓ (195-kg net) metal drums
Ref.: Product data No. 750-9

ABS 124ESG. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: General purpose molding grade with high tensile and flexural properties, and good heat resistance; used for spools and molded parts requiring high tensile modulus

Form: Solid; Color: Natural

Gen'l. Prop.: Sp. Gr.: 1.05 (23/23 C, D-792); Soften. Pt. (Vicat): 225 F (D1525)

Mech. Prop.: Tens. Str.: 7700 psi (D-638); Tens. Elong.: 10% (D638); Tens. Mod.: 340,000 psi (D638); Flex. Str.: 12,000 psi (D790); Flex. Mod.: 330,000 psi (D790); Impact Str. (Izod): 2.5 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 112 R (D785)

Therm. Prop.: Distort. Temp.: 215 F (@ 264 psi, D648)

ABS 124ESGE. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Application: General purpose, semigloss, profile and sheet extrusion grade, for use in refrigerator breaker strips and profiles

Form: Solid; Color: Natural

Gen'l. Prop.: Sp. Gr.: 1.05 (23/23 C, D-792), Soften. Pt. (Vicat): 220 F (D-1525)

Mech. Prop.: Tens. Str.: 6000 psi (D-638); Tens. Elong.: 25% (D638); Tens. Mod.: 310,000 psi (D638); Flex. Str.: 9000 psi (D790), Flex. Mod.: 340,000 psi (D790); Impact Str. (Izod): 2.0 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 110 R (D785)

Therm. Prop.: Distort. Temp.: 205 F (@ 264 psi, D648)

ABS 125M. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: General purpose molding grade; high flow for thin sections and intricate moldings; easily decorated, good chemical resistance; used for toys, closures, small knobs and parts

Form: Solid; Color: Natural

Gen'l. Prop.: Sp. Gr.: 1.05 (23/23 C, D-792); Soften. Pt. (Vicat): 218 F (D1525)

Mech. Prop.: Tens. Str.: 5400 psi (D-638); Tens. Elong.: 30% (D638); Tens. Mod.: 310,000 psi (D638); Flex. Str.: 9000 psi (D790); Flex. Mod.: 355,000 psi (D790); Impact Str. (Izod): 1.5 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 109 R (D785)

Therm. Prop.: Distort. Temp.: 205 F (@ 264 psi, D648)

ABS 224M. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: General purpose molding grade copolymer; low luster with good toughness; used for tackle boxes, carrying cases

Form: Solid; Color: Natural

Gen'l. Prop.: Sp. Gr.: 1.05 (23/23 C, D-792); Soften. Pt. (Vicat): 220 F (D1525)

Mech. Prop.: Tens. Str.: 6500 psi (D-638); Tens. Elong.: 30% (D638); Tens. Mod.: 305,000 psi (D638); Flex. Str.: 10,000 psi (D790); Flex. Mod.: 360,000 psi (D790); Impact Str. (Izod): 2.5 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 110 R (D785)

Therm. Prop.: Distort. Temp.: 205 F (@ 264 psi, D648)

ABS 236F. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: General purpose

automotive grade copolymer with high impact and good flow; injection molding; used for automotive interior parts

Form: Solid; Color: Natural and colors
Gen'l. Prop.: Sp. Gr.: 1.05 (23/23 C, D-792); Soften. Pt. (Vicat): 218 F (D1525)
Mech. Prop.: Tens. Str.: 5600 psi (D-638); Tens. Elong.: 50% (D638); Tens. Mod.: 270,000 psi (D638); Flex. Str.: 8200 psi (D790); Flex. Mod.: 320,000 psi (D790); Impact Str. (Izod): 5.9 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 103 R (D785)
Therm. Prop.: Distort. Temp.: 203 F (@ 264 psi, D648)

ABS 236MA. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: Medium impact grade copolymer for profile extrusions for automotive and appliance applications

Form: Solid; Color: Natural
Gen'l. Prop.: Sp. Gr.: 1.05 (23/23 C, D-792); Soften. Pt. (Vicat): 220 F (D-1525)
Mech. Prop.: Tens. Str.: 5700 psi (D-638); Tens. Elong.: 35% (D638); Tens. Mod.: 285,000 psi (D638); Flex. Str.: 9500 psi (D790); Flex. Mod.: 360,000 psi (D790); Impact Str. (Izod): 4.5 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 106 R (D785)
Therm. Prop.: Distort. Temp.: 208 F (@ 264 psi, D648)

ABS 236R. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: General purpose automotive grade copolymer, low impact, high stiffness; for injection molding for automotive parts, package trays, console components

Form: Solid; Color: Natural and colors
Gen'l. Prop.: Sp. Gr.: 1.05 (23/23 C, D-792); Soften. Pt. (Vicat): 220 F (D1525)
Mech. Prop.: Tens. Str.: 7100 psi (D-638); Tens. Elong.: 11% (D638); Tens. Mod.: 310,000 psi (D638); Flex. Str.: 11,100 psi (D790); Flex. Mod.: 370,000 psi (D790); Impact Str. (Izod): 2.5 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 114 R (D785)
Therm. Prop.: Distort. Temp.: 209 F (@ 264 psi, D648)

ABS 301K. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: Injection molding, pipe fitting grade; DWV-NSF approved; high ESCR properties; fittings for DWV, sewer pipe, and conduit

Form: Solid; Color: Black
Gen'l. Prop.: Sp. Gr.: 1.05 (23/23 C, D-792); Soften. Pt. (Vicat): 212 F (D1525)
Mech. Prop.: Tens. Str.: 5500 psi (D-638); Tens. Elong.: 30% (D638); Tens. Mod.: 280,000 psi (D638); Flex. Str.: 9000 psi (D790); Flex. Mod.: 360,000 psi (D790); Impact Str. (Izod): 6.0 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 103 R (D785)
Therm. Prop.: Distort. Temp.: 205 F (@ 264 psi, D648)

ABS 323MA. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: Tough, high impact, automotive grade copolymer with good flow properties for molding low stress parts; automotive ducts and bezels

Form: Solid; Color: Natural
Gen'l. Prop.: Sp. Gr.: 1.05 (23/23 C, D-792); Soften. Pt. (Vicat): 212 F (D1525)
Mech. Prop.: Tens. Str.: 5600 psi (D-638); Tens. Elong.: 40% (D638); Tens.

Mod.: 275,000 psi (D638); Flex. Str.: 8300 psi (D790); Flex. Mod.: 348,000 psi (D790); Impact Str. (Izod): 6.0 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 103 R (D785)

Therm. Prop.: Distort. Temp.: 205 F (@ 264 psi, D648)

ABS 400P. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: General purpose molding grade copolymer; medium impact, semigloss; used for various appliance housings; UL 94 HB rating

Form: Solid; Color: Natural and colors

Gen'l. Prop.: Sp. Gr.: 1.05 (23/23 C, D-792); Soften. Pt. (Vicat): 220 F (D1525)

Mech. Prop.: Tens. Str.: 5500 psi (D-638); Tens. Elong.: 30% (D638); Tens. Mod.: 290,000 psi (D638); Flex. Str.: 9500 psi (D790); Flex. Mod.: 355,000 psi (D790); Impact Str. (Izod): 4.0 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 106 R (D785)

Therm. Prop.: Distort. Temp.: 204 F (@ 264 psi, D648)

ABS 410ESG. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: Profile and sheet extrusion grade copolymer, medium impact, semigloss, for use in appliance, cooler, and similar applications

Form: Solid; Color: Natural

Gen'l. Prop.: Sp. Gr.: 1.05 (23/23 C, D-792); Soften. Pt. (Vicat): 215 F (D-1525)

Mech. Prop.: Tens. Str.: 5100 psi (D-638); Tens. Elong.: 35% (D638); Tens. Mod.: 265,000 psi (D638); Flex. Str.: 8300 psi (D790); Flex. Mod.: 330,000 psi (D790); Impact Str. (Izod): 4.5 ft lb/in. notched (23 C, D256); Hardness

(Rockwell): 104 R (D785)

Therm. Prop.: Distort. Temp.: 203 F (@ 264 psi, D648)

ABS 414MA. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: High gloss, stiffness, automotive grade copolymer with easy flow; instrument panels

Form: Solid; Color: Natural

Gen'l. Prop.: Sp. Gr.: 1.05 (23/23 C, D-792); Soften. Pt. (Vicat): 224 F (D1525)

Mech. Prop.: Tens. Str.: 7200 psi (D-638); Tens. Elong.: 15% (D638); Tens. Mod.: 330,000 psi (D638); Flex. Str.: 10,500 psi (D790); Flex. Mod.: 320,000 psi (D790); Impact Str. (Izod): 1.0 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 112 R (D785)

Therm. Prop.: Distort. Temp.: 204 F (@ 264 psi, D648)

ABS 420A. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: Profile and sheet extrusion grade copolymer, high impact, matte finish, with good toughness for use for recreational vehicle interior parts, etc.

Form: Solid; Color: Natural

Gen'l. Prop.: Sp. Gr.: 1.05 (23/23 C, D-792); Soften. Pt. (Vicat): 217 F (D-1525)

Mech. Prop.: Tens. Str.: 3500 psi (D-638); Tens. Elong.: 70% (D638); Tens. Mod.: 225,000 psi (D638); Flex. Str.: 5500 psi (D790); Flex. Mod.: 214,000 psi (D790); Impact Str. (Izod): 5.0 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 90 R (D785)

Therm. Prop.: Distort. Temp.: 205 F (@ 264 psi, D648)

ABS 424ESM. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: Profile and sheet extrusion grade copolymer, medium impact, matte finish, for use in automotive, recreational, appliance, luggage cases, etc. applications

Form: Solid; Color: Natural

Gen'l. Prop.: Sp. Gr.: 1.05 (23/23 C, D-792); Soften. Pt. (Vicat): 219 F (D-1525)

Mech. Prop.: Tens. Str.: 4000 psi (D-638); Tens. Elong.: 60% (D638); Tens. Mod.: 235,000 psi (D638); Flex. Str.: 6100 psi (D790); Flex. Mod.: 230,000 psi (D790); Impact Str. (Izod): 3.0 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 92 R (D785)

Therm. Prop.: Distort. Temp.: 207 F (@ 264 psi, D648)

ABS 500FR-1. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: Flame retardant grade; high impact with good stability; easily reprocessed scrap trim (non-PVC); good heat distortion; used for aircraft, automotive, appliance parts; furniture, smoke detector housings; UL 94 V-O rating

Form: Solid; Color: Natural

Gen'l. Prop.: Sp. Gr.: 1.33 (23/23 C, D-792); Soften. Pt. (Vicat): 198 F (D1525)

Mech. Prop.: Tens. Str.: 4600 psi (D-638); Tens. Elong.: 20% (D638); Tens. Mod.: 255,000 psi (D638); Flex. Str.: 6100 psi (D790); Flex. Mod.: 270,000 psi (D790); Impact Str. (Izod): 5.0 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 70 R (D785)

Therm. Prop.: Distort. Temp.: 187 F (@ 264 psi, D648)

ABS 504ESG. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: Profile and sheet extrusion grade copolymer, high impact, glossy, for use in refrigerator liners and recreational uses

Form: Solid; Color: Natural

Gen'l. Prop.: Sp. Gr.: 1.04 (23/23 C, D-792); Soften. Pt. (Vicat): 220 F (D-1525)

Mech. Prop.: Tens. Str.: 5500 psi (D-638); Tens. Elong.: 20% (D638); Tens. Mod.: 280,000 psi (D638); Flex. Str.: 8500 psi (D790); Flex. Mod.: 295,000 psi (D790); Impact Str. (Izod): 6.5 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 100 R (D785)

Therm. Prop.: Distort. Temp.: 205 F (@ 264 psi, D648)

ABS 506ESG. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: Profile and sheet extrusion grade copolymer, glossy, very high impact grade with good low temp. performance, for use in camper, appliance, and housings

Form: Solid; Color: Natural

Gen'l. Prop.: Sp. Gr.: 1.03 (23/23 C, D-792); Soften. Pt. (Vicat): 216 F (D-1525)

Mech. Prop.: Tens. Str.: 4400 psi (D-638); Tens. Elong.: 40% (D638); Tens. Mod.: 225,000 psi (D638); Flex. Str.: 6700 psi (D790); Flex. Mod.: 235,000 psi (D790); Impact Str. (Izod): 7.5 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 85 R (D785)

Therm. Prop.: Distort. Temp.: 204 F (@ 264 psi, D648)

ABS 510EC. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: Pipe extrusion grade; WE and NSF approved; high modulus; used for conduit and sewer pipe

Form: Solid; Color: Black

Gen'l. Prop.: Sp. Gr.: 1.05 (23/23 C, D-792); Soften. Pt. (Vicat): 218 F (D1525)

Mech. Prop.: Tens. Str.: 6500 psi (D-638); Tens. Elong.: 15% (D638); Tens. Mod.: 300,000 psi (D638); Flex. Str.: 10,000 psi (D790); Flex. Mod.: 360,000 psi (D790); Impact Str. (Izod): 2.5 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 110 R (D785)

Therm. Prop.: Distort. Temp.: 203 F (@ 264 psi, D648)

ABS 522ESM. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: Profile and sheet extrusion grade copolymer, very high impact, matte finish, excellent low temp. performance; for use in luggage, ATV, camper, and other applications

Form: Solid; Color: Natural

Gen'l. Prop.: Sp. Gr.: 1.04 (23/23 C, D-792); Soften. Pt. (Vicat): 215 F (D1525)

Mech. Prop.: Tens. Str.: 3400 psi (D-638); Tens. Elong.: 70% (D638); Tens. Mod.: 200,000 psi (D638); Flex. Str.: 5300 psi (D790); Flex. Mod.: 194,000 psi (D790); Impact Str. (Izod): 7.0 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 85 R (D785)

Therm. Prop.: Distort. Temp.: 203 F (@ 264 psi, D648)

ABS 550ES. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: Profile and sheet extrusion grade copolymer, very high impact grade with high tensile and flexural properties; used for core laminates

Form: Solid; Color: Natural

Gen'l. Prop.: Sp. Gr.: 1.05 (23/23 C, D-792); Soften. Pt. (Vicat): 217 F (D1625)

Mech. Prop.: Tens. Str.: 5600 psi (D-638); Tens. Elong.: 15% (D638); Tens. Mod.: 272,000 psi (D638); Flex. Str.: 9000 psi (D790); Flex. Mod.: 321,000 psi (D790); Impact Str. (Izod): 9.0 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 100 R (D785)

Therm. Prop.: Distort. Temp.: 206 F (@ 264 psi, D648)

ABS 606ED. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: Pipe extrusion grade; DWV-NSF approved; used for DWV pipe

Form: Solid; Color: Black

Gen'l. Prop.: Sp. Gr.: 1.04 (23/23 C, D-792); Soften. Pt. (Vicat): 220 F (D1525)

Mech. Prop.: Tens. Str.: 5200 psi (D-638); Tens. Elong.: 25% (D638); Tens. Mod.: 280,000 psi (D638); Flex. Str.: 7900 psi (D790); Flex. Mod.: 280,000 psi (D790); Impact Str. (Izod): 8.5 ft lb/in. notched (23 C, D256); Hardness (Rockwell): 92 R (D785)

Therm. Prop.: Distort. Temp.: 209 F (@ 264 psi, D648)

ABS 707H. Mobil Chem. Co.

Chem. Descrip.: Acrylonitrile/butadiene/styrene copolymer

Category/Applications: General purpose molding grade; high flow, medium impact with good stiffness and gloss; used for appliances, housings, garden equipment; NSF approved for swimming pool valves in potable water

Form: Solid; Color: Natural

Gen'l. Prop.: Sp. Gr.: 1.04 (23/23 C, D-792); Soften. Pt. (Vicat): 212 F (D1525)