

Liquidtight Systems Non-metallic Conduit and Tubing

Poly Tuff® I and Poly Tuff® II

PolyTuff I

Rigid PVC core bonded to flexible PVC jacket.

All non-metallic construction ends metal fatigue and separation problems.

UL Listed and CSA Certified.

Cuts cleanly with a knife or PVC cutter so there are no jagged edges.

PolyTuff II

PVC core with corrugated walls bonded to PVC jacket.

Handles twists, turns, bends, switchbacks and straightaways with ease.

All non-metallic construction ends fatigue and separation problems.

Can be cut with a knife or PVC cutters.

UL Recognized and CSA Certified.

Flexibility and Corrosion Resistance

Hubbell Polytuff I Conduit and Polytuff II Tubing are entirely non-metallic, providing superior flexibility and outstanding corrosion resistance. Polytuff conduit and tubing comes in sizes ranging from 1/4" to 2" diameter. Polytuff is made from PVC which gives you the extra flexibility for tight turns, nonconductivity, corrosion resistance and ease of installation not found in metallic liquidtight conduit.





PolyTuff I Conduit

Trade Size	Catalog		Conduit II	D/OD	Bend Radius		
(metric designator)	Numbers	Feet (m)	Inches	(mm)	Inches	(mm)	
³ / ₈ " (12)	G1038	100 (30.5)	.49"/.70"	(12.6/17.8)	2.00"	(50.8)	
1/2" (16)	G1050	100 (30.5)	.63"/.83"	(16.1/21.1)	3.00"	(76.2)	
³ / ₄ " (21)	G1075	100 (30.5)	.83"/1.04"	(21.1/26.4)	4.00"	(101.6)	
1" (27)	G1100	100 (30.5)	1.05"/1.30"	(26.0/33.1)	5.00"	(217.0)	
11/4" (35)	G1125	100 (30.5)	1.40"/1.65"	(35.4/41.8)	6.30"	(158.8)	
11/2" (41)	G1150	50 (15.2)	1.59"/1.88"	(40.3/47.8)	7.50"	(190.5)	
2" (53)	G1200	50 (15.2)	2.03"/2.36"	(51.6/59.9)	10.00"	(254.0)	



PolyTuff I Conduit

_	
Operating Temper	ature Range
Wet environment	0°F to +140°F (-18°C to +60°C).
Oil environment	0°F to +158°F (-18°C to +70°C).
Dry environment	0°F to +176°F (-18°C to +80°C).
Certifications	
UL Listed	UL Standard 1660.
	Sunlight resistant approved for outdoor
	use, direct burial.
CSA Certified	Meets requirements of NEC Article 351-B.
Voltage Rating	
Maximum	600V.
Material	
Conduit	Co-extruded rigid and flexible PVC.

PolyTuff II Tubing

Trade Size	Catalog		Conduit ID	/OD	Bend Radius		
(metric designator)	Numbers	Feet (m)	Inches	(mm)	Inches	(mm)	
1/4" (10)	B2025	100 (30.5)	.36"/.57"	(9.3/14.5)	1.50"	(38.1)	
³ / ₈ " (12)	B2038	100 (30.5)	.49"/.70"	(12.6/17.8)	2.00"	(50.8)	
1/2" (16)	B2050	100 (30.5)	.63"/.83"	(16.1/21.1)	2.00"	(50.8)	
3/4" (21)	B2075	100 (30.5)	.83"/1.04"	(21.1/26.4)	3.00"	(76.2)	
1" (27)	B2100	100 (30.5)	1.05"/1.30"	(26.0/33.1)	3.00"	(76.2)	
11/4" (35)	B2125	100 (30.5)	1.40"/1.65"	(35.4/41.8)	5.00"	(127.0)	
11/2" (41)	B2150	50 (15.2)	1.59"/1.88"	(40.3/47.8)	5.00"	(127.0)	
2" (53)	B2200	50 (15.2)	2.03"/2.36"	(51.6/59.9)	5.00"	(127.0)	



PolyTuff II Tubing

Operating Temperatu	ıre Range
Operating Environment	0°F to +140°F (-18°C to +60°C).
Certifications	
UL Recognized CSA Certified	
Voltage Rating	
Maximum	Same as wire insulation rating.
Material	
Tubing	Co-extruded rigid and flexible PVC.



Non-metallic Liquidtight Systems

Poly Tuff® Non-metallic Connectors

Nylon compression nut has a tapered dome to tighten ferrule onto conduit.

Nylon locknut fastens connector securely to enclosure and provides superior corrosion resistance.

Neoprene O-ring provides liquidtight seal at hub or enclosure.

Nylon two-piece swivel body enables fitting to twist from 0° to 90° .

Non-integral ferrule provides conduit seal and superior pullout protection.

Straight and SwivelLock® Connectors

Hubbell non-metallic liquidtight connectors are made from nylon and range in size from 1/4" to 2". The nylon connectors are completely nonconductive, corrosion resistant and easier to install than metallic liquidtight fittings. The patented SwivelLock® design eliminates the need for separate straight, 45°, and 90° fittings by providing a full range in one device. Non-metallic connectors have a unique design which allows Hubbell to claim UL 50 ratings of 3R, 4X, 12 and 13.

Polytuff Fittings

Operating Temperature*	
Nylon (Body, Nut, Gripping Ring and Locknut) Neoprene (Sealing Ring)	-40°F to $+225$ °F (-40 °C to $+107$ °C). -30°F to $+240$ °F (-34 °C to $+116$ °C).
Flammability	
Fire Gas Toxicity Product Testing	Nylon PolyTuff Fittings have a UL 94V–2 rating.
Certifications	
UL Listed	UL50 Type 4X, 12 and 13
CSA Certified	PolyTuff I Fittings, Poly Tuff II Fittings.

*Due to the limiting factors of nylon and neoprene, PolyTuff Fittings will continuously perform in the range -30°F to +225°F (-34°C to +107°C).

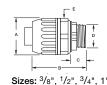


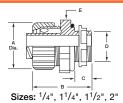


Straight Liquidtight Connectors









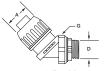
Trade Size (metric	Black Catalog	Gray Catalog	A	В	С	D		E
designator)	Numbers	Numbers				Throat Dia	. A/C*	A/F*
¹ / ₄ " (10)	F5025	_	.93" (23.6)	1.45" (36.8)	.39" (9.9)	.32" (8.1)	.86" (21.8)	.86" (21.8)
³ /8" (12)	P038NBK	P038NGY	1.14" (29.0)	1.63" (41.4)	.57"(14.5)	.42" (10.7)	1.41" (35.8)	1.30" (33.0)
¹ / ₂ " (16)	P050NBKA	P050NGYA	1.30" (33.0)	2.14" (54.4)	.57"(14.5)	.55" (14.0)	1.41" (35.8)	1.30" (33.0)
³ /4" (21)	P075NBKA	P075NGYA	1.53" (38.9)	2.22" (56.4)	.58"(14.7)	.74" (18.8)	1.85" (47.0)	1.53" (38.9)
1" (27)	P100NBKA	P100NGYA	1.80" (45.7)	2.32" (58.9)	.72"(18.3)	.96" (24.4)	1.94" (49.3)	1.80"(45.7)
1 ¹ / ₄ " (35)	P125NBK	P125NGY	2.20" (55.9)	2.15" (54.6)	.74"(18.8)	1.30" (33.0)	2.38" (60.5)	2.18" (55.4)
1 ¹ /2" (41)	P150NBK	P150NGY	2.49" (63.2)	2.35" (59.7)	.76"(19.3)	1.46" (37.1)	2.63" (66.8)	2.43" (61.7)
2" (53)	P200NBK	P200NGY	3.05" (77.4)	2.51" (63.6)	.79"(20.1)	1.90" (48.3)	3.13" (79.5)	2.93" (74.4)

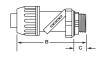
SwivelLok® Multi-Position with Male Non-metallic Liquidtight Fittings











PSO509NGY - SwilelLok

PSO509NGY - SwilelLok

90° Position

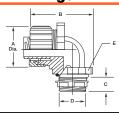
tion Straight Position

Trade Size (metric	Black Catalog	Gray Catalog	A	В	С	D	E	F		G
designator)	Numbers	Numbers							A/C*	A/F*
³ /8" (12)	PS0389NBK	PS0389NGY	1.30" (33.0)	3.27" (83.1)	.57" (14.5)	.55" (14.0)	1.43" (36.3)	2.00" (50.8)	1.41" (35.8)	1.30" (33.0)
1/2" (16)	PS0509NBK	PS0509NGY	1.30" (33.0)	3.27" (83.1)	.57"(14.5)	.55" (14.0)	1.43" (36.3)	2.00" (50.8)	1.41" (35.8)	1.30" (33.0)
3/4" (21)	PS0759NBK	PS0759NGY	1.53" (38.9)	3.66" (93.0)	.58"(15.7)	.74" (18.8)	1.59" (40.4)	2.23" (56.6)	1.65" (41.9)	1.53" (38.9)
1" (27)	PS1009NBK	PS1009NGY	1.80" (45.7)	4.00" (101.6)	.72"(18.3)	.96" (24.4)	1.84" (46.7)	2.30" (58.4)	1.94" (49.3)	1.80" (45.7)

90° with Male Non-metallic Liquidtight Fittings







Trade Size (metric	Black Catalog	Gray Catalog	A	В	С	D		E	
designator)	Numbers	Number				Throat Dia	ı. A/C*	A/F*	
1/4" (10)	F20259	_	.93" (23.6)	1.88" (47.8)	.39" (9.9)	.32" (8.1)	.86" (21.8)	.86" (21.8)	
11/4" (35)	P1259NBK	P1259NGY	2.21" (56.1)	3.57" (90.7)	.74"(18.9)	1.30" (33.0)	2.38" (60.5)	2.18" (55.4)	

SwivelLok Flexible Conduit Kit

Trade Size (metric	Fitting and	Catalog
designator)	Conduit	Numbers
1/2" (16)	2 PS0509NGY, 6' G1050	PS05GYKIT
3/4" (21)	2 PS0759NGY, 6' G1075	PS07GYKIT







Metallic Liquidtight Systems Liquidtight Conduit Connectors Hexagonal, screw-machined steel nut. Solid polypropylene gland-ring creates an environmental seal. Non-integral, reusable steel, ferrule is easily installed, to seal conduit. Threaded one-piece steel body.

Locknut has hardened steel tangs to grip securely.

Nylon gasket provides liquidtight seal at hub.

Tapered, machined threads fasten securely and provide additional liquidtight sealing.

Optional insulated and non-insulated throat.

Insulated and Non-Insulated Conduit Connectors

Hubbell offers a broad line of metallic liquidtight fittings for use with metallic liquidtight conduits and Polytuff I. Hubbell offers trade sizes from 3/8" to 4" in straight, 45°, and 90° body designs. Most connectors are available with either insulated or non-insulated throats. Liquidtight fittings are precision manufactured to exacting standards assuring ease of use and reliability. Straight body ½" and ¾" sizes are listed for UL Type 3R, 4, 12 and 13 environmental ratings.

Liquidtight Fittings

Operating Temperature**	
Steel/Malleable Iron (Nut, Body, Ferrule) Nylon (Gland Ring)	-60°F to +1000°F (-51°C to +538°C). -40°F to +225°F (-40°C to +107°C).
Hazardous Locations	NEC Reference
Class I, Div. 2	501–4b
Class II, Div. 1	502-4a2
Class II, Div. 2	502-4b2
Class III, Div. 1	503-3a2
Class III, Div. 2	503-3b
Certifications	
UL Listed	
CSA Certified	

^{**}Due to the limiting factors of nylon, metallic liquidtight flexible conduit fittings will continuously perform in the range of -40°F to +225°F (-40°C to +107°C).

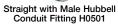


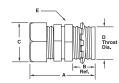




Straight Conduit Connector





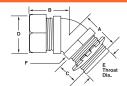


Trade Size Insulated (metric Catalog				В	c		D	E	
designator)	Numbers	Numbers			A/C*	A/F*	Throat Dia.	A/C*	A/F*
3/8" (12)	H0381	H038	1.43" (36.3)	.59" (15.0)	1.20" (30.0)	1.06" (26.9)	.61" (15.5)	1.07" (27.2)	.93" (23.6)
1/2" (16)	H0501A	H050A	1.43" (36.3)	.59" (15.0)	1.34"(34.0)	1.19" (30.2)	.61" (15.5)	1.22" (31.0)	1.06" (26.9)
3/4" (21)	H0751A	H075A	1.56" (39.6)	.59" (15.0)	1.55"(39.0)	1.37" (34.8)	.84" (21.3)	1.43" (36.3)	1.25" (31.8)
1" (27)	H1001	H100	1.68" (42.7)	.66" (16.8)	1.95"(50.0)	1.69" (42.9)	1.06" (26.9)	1.73"(43.9)	1.56" (39.6)
11/4" (35)	H1251	H125	2.03" (51.6)	.63" (16.88)	2.39"(61.0)	2.06" (52.3)	1.37" (34.8)	2.36" (59.9)	2.08" (52.8)
11/2" (41)	H1501	H150	2.21" (56.1)	.63" (16.88)	2.72"(69.0)	2.38" (60.5)	1.53" (38.9)	2.79" (70.9)	2.48" (63.0)
2" (53)	H2001	H200	2.28" (57.9)	.69" (17.5)	3.08"(78.0)	2.87" (72.9)	2.06" (52.3)	3.32" (84.3)	2.90" (73.7)
21/2" (63)	H2501	_	3.56" (90.4)	1.06" (26.9)	3.92"(100.0)	3.62" (91.9	2.42" (61.5)	3.85" (97.8)	3.60" (91.4)
3" (78)	H3001	_	3.81" (96.8)	1.06" (26.9)	4.70"(119.0)	4.31" (109.5)	3.01" (76.5)	4.65" (118.1)	4.33" (110.0)
3 ¹ /2 (91)	H3501	_	3.81" (96.8)	1.06" (26.9)	5.29"(134.0)	4.81" (122.2)	3.49" (88.6)	5.18" (131.6)	4.82" (122.4)
4" (103)	H4001	_	3.81" (96.8)	1.06" (26.9)	5.75"(146.0)	5.31" (134.9)	3.96" (100.6)	5.75" (146.1)	5.39" (136.9)

45° Liquidtight Connectors



45° Angle with Male Hubbell Conduit Fitting H05041

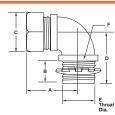


Trade Size	Insulated	Non-Insulat	ed							
(metric	Catalog	Catalog	A	В	C	D	<u> </u>	E		F
designator)	Numbers	Numbers				A/C*	A/F*	Throat Dia.	A/C*	A/F*
³ /8" (12)	H03841	H0384	1.19" (30.2)	1.28" (32.5)	.59"(15.0)	1.20" (30.5)	1.06" (26.9)	.60" (15.2)	1.16" (29.5)	1.02" (25.9)
1/2" (16)	H05041	H0504	1.19" (30.2)	1.28" (32.5)	.59"(15.0)	1.34" (34.0)	1.19" (30.2)	.61" (15.2)	1.21" (30.7)	1.06" (26.9)
3/4" (21)	H07541	H0754	1.19" (30.2)	1.43" (36.3	.59"(15.0)	1.55" (39.4)	1.45" (36.8)	.84" (21.3)	1.50" (38.1)	1.32" (33.5)
1" (27)	H10041	H1004	1.38" (35.1)	1.53" (38.9	.66"(1.68)	1.95" (49.5)	1.69" (42.9	1.05"(26.7)	1.82" (46.2)	1.59" (40.4)
11/4" (35)	H12541	H1254	1.42" (36.1)	1.69" (42.9)	.63"(16.0)	2.39" (60.7)	2.06" (52.3)	1.37" (34.8)	2.32" (58.9)	2.03" (51.6)
1 ¹ /2" (41)	H15041	H1504	1.66" (42.2)	2.00" (50.8)	.66"(1.68)	2.72" (69.1)	2.38" (60.5)	1.60" (40.6)	2.62" (66.5)	2.29" (58.2)
2" (53)	H20041	H2004	1.69" (42.9	2.25" (57.2)	.66"(1.68)	3.08" (78.2)	2.88" (73.2)	2.05" (52.1)	3.21" (81.5)	2.80" (71.1)

90° Liquidtight Connectors



90° Angle with Male Hubbell Conduit Fitting H0509



Trade Size (metric	Black Catalog	Gray Catalog	A	В		С	D	E	F	
designator)	Numbers	Numbers			A/C*	A/F*	Ref.	Throat Dia.	A/C*	A/F*
³ /8" (12)	H03891	H0389	1.31" (33.3)	.59" (15.0)	1.20" (30.5)	1.06" (26.9)	1.44" (36.6)	.60" (15.2)	1.13" (29.0)	.99" (25.1)
1/2" (16)	H05091	H0509	1.31" (33.3)	.59" (15.0)	1.34" (34.0)	1.12" (28.4)	1.44" (36.6)	.61" (15.2)	1.12" (28.0)	1.00" (25.4)
³ / ₄ " (21)	H07591	H0759	1.44" (36.6)	.59" (15.0)	1.55" (39.4)	1.45" (36.8)	1.63" (41.4)	.83" (21.1)	1.48" (38.0)	1.29" (32.8)
1" (27)	H10091	H1009	1.78" (45.2)	.59" (15.0)	1.95" (49.5)	1.60" (40.6)	2.19" (55.6)	1.05"(26.7)	1.80" (46.0)	1.57" (39.9)
11/4" (35)	H12591	H1259	1.97" (50.0)	.63" (16.0)	2.39" (60.7)	2.06" (52.3)	2.50" (63.5)	1.36" (34.5)	2.32" (58.9)	2.02" (51.3)
11/2" (41)	H15091	H1509	2.19" (55.6)	.63" (16.0)	2.72" (69.1)	2.38" (60.5)	2.69" (68.3)	1.61" (40.9)	2.58" (66.0)	2.25" (57.2)
2" (53)	H20091	H2009	2.53" (64.3)	.66" (16.8)	3.08" (78.2)	2.87" (72.9)	3.25" (82.6)	2.05" (52.1)	3.14" (80.0)	2.75" (69.9)
21/2" (63)	H25091	_	3.44" (87.4)	1.00" (25.4)	3.92" (99.6)	3.63" (92.2)	4.25" (108.0)	2.42" (61.5)	3.78" (96.0)	3.50" (88.9)
3" (78)	H30091	_	3.75" (95.3)	1.00" (25.4)	4.70"(119.4)	4.31" (109.5	4.87" (123.7)	3.01" (76.5)	4.64" (118.0)	4.30" (109.2)
4" (103)	H40091	_	4.25" (108.0)	1.00" (25.4)	5.75"(146.1)	5.31" (134.9)	5.63" (143.0)	3.96" (100.6)	5.76" (146.0)	5.38" (136.7)



Non-metallic Liquidtight Conduit and Tubing

Technical Data

PolyTuff I and II Conduit/Tubing; PVC Chemical Resistance

Chemical	Conc*	Temp 70°F 21°C	150°F 66°C	Chemical	Conc*	Temp. 70°F 21°C	150°F 66°C	Chemical	Conc*	Temp. 70°F 21°C	150°F 66°C
Acetate Solvents		D	D	Cyclohexane		В	С	Monochlorobenezene		Α	Α
Acetic Acid		В	С	DDT Weed Killer		Α	С	Muriatic Acid (see Hydr	ochloric Aci	d)	
Acetic Acid (Glacial)		С	D	Dibutyl Phthalate		D	D	Naphtha		C	D
Acetone		D	D	Diesel Oils		С	D	Naphthalene		D	D
Acrylontrile		Α	В	Diethylene Glycol		В	С	Nitric Acid	10%	6 А	В
Alcohols (Aliphatic)		С	С	Diethyl Ether		Α	C	Nitric Acid	35%	6 А	С
Aluminum Chloride		Α	Α	Di-isodecyl Phthalate		D	D	Nitric Acid	70%	6 D	D
Aluminum Sulfate (Alums)		Α	Α	Dioctyl Phthalate		D	D	Oleic Acid		Α	С
Ammonia (Anhydrous Liqu	ids)	D	D	Dow General Weed Killer (P	henol)	D	D	Oleum		D	D
Ammonia (Aqueous)		Α	Α	Dow General Weed Killer (H	(0را	В	С	Oxalic Acid		Α	Α
Ammoniated Latex		Α	С	Ethyl Alcohol	_	С	С	Pentachlorophenol in 0	il	В	С
Ammonium Chloride		Α	Α	Ethylene Dichloride		D	D	Pentane		С	D
Ammonium Hydroxide		Α	Α	Ethylene Glycol		В	С	Perchloroethylene		В	С
Amyl Acetate		D	D	Ferric Chloride		Α	Α	Petroleum Ether		С	С
Aniline Oils		D	D	Ferric Sulfate		Α	Α	Phenol		Α	Α
Aromatic Hydrocarbons		D	D	Ferrous Chloride		Α	Α	Phosphoric Acid	10%	6 Α	Α
Asphalt		D	D	Ferrous Sulfate		Α	Α	Pitch	50%	6 Α	В
ASTM Fuel A		С	С	Formaldehyde		D	D	Potassium Hydroxide		С	D
ASTM Fuel B		 D	D	Fuel Oil		В		Sodium Cyanide		Α	A
ASTM #1 Oil		В	C	Furfural		Č	Č	Stoddard Solvent		D	D
ASTM #3 Oil		Č	D	Gallic Acid		Ā	Ā	Styrene		D	D
Barium Chloride		Ä	A	Gasoline (Hi Test)		C	D	Sulfur Dioxide (liquid)		Ď	D
Barium Sulfide		A	A	Glycerine		Ā	Ā	Sulfuric Acid 50%		Ā	В
Barium Hydroxide		A	A	Grease		A	C	Sulfuric Acid 98%		D	D
Benzene (Benzol)		D		Green Sulfate Liquor		A	A	Sulfurous Acid		В	C
Benzine (Petroleum Ether)		C	C	Heptachlor in Petroleum So	olvents	A	C	Tall Oil		D	D
Black Liquor		A	A	Heptane	Jivonto	Ċ	D	Tannic Acid		Ä	Ā
Bordeaux Mixture		A	A	Hexane		Č	D	Toluene		D	D
Boric Acid		A	A	Hydrobromic Acid		Ä	A	Trichlorethylene		D	D
Butyl Acetate		D	D	Hydrochloric Acid	10%	A	A	Triethanol Amine		C	D
		В	C	Hydrochloric Acid	40%	C	C	Tricresyl Phosphate (Sk	rydrol)	 D	D
Butyl Alcohol		A	A	Hydrofluoric Acid	70%		D	Turpentine	yuror)	C	D
Calcium Hydroxide			A	Hydrofluorosilicic Acid	107	A	A	Vinegar		A	В
Calcium Hypochlorite Carbolic Acid (Phenol)		A B	C	Hydrofluorosilicic Acid	10%	A	A	Vinyl Chloride		D	D
Carbon Dioxide				Hydrogen Peroxide	10 /0	A	В	Water		A	A
		A D	A D	Iso-Octane		C	C	White Liquor		Ä	A
Carbon Disulfide			D			 D		Xylene			 D
Carbon Tetrachloride		D	_	Isopropyl Acetate Isopropyl Acid		В	C	Zinc Chloride		A	A
Carbonic Acid		A	A	Jet Fuels (JP–3, and 5)		C	D	Zinc Chloride Zinc Sulfate		A	A
Casein		A	С	Kerosene		C	C	Zilic Sullate		- А	А
Caustic Soda		A	В	Ketones		D	D	Dating Oads			
Chlorine Gas (wet)		D	D	Linseed Oil		A	A	Rating Code			
Chlorine Gas (dry)		D	D					A-Excellent servic			
Chlorine (water solution)		С	D	Lubricating Oils		A	A	No harmful effect to redu		١.	
Chlorobenzene		D	D	Magnesium Chloride		A	A	Suitable for continuous se			
Chlorinated Hydrocarbons		D	D	Magnesium Hydroxide		A	A	B-Good service life			
Chromic Acid		В	C	Magnesium Sulfate		A	A	Moderate to minor effect.			
Citric Acid		A	A	Malathion 50 in Aromatics		D	D	service. Generally suitable	e for continuo	us	
Coal Tar		D	D	Malic Acid		A	A	service.	_		
Coconut Oil		C	D	Methyl Acetate		D	D	C-Fair or limited s			
Corn Oil		Α	В	Methyl Alcohol		C	C	Depends on operating cor			
Cottonseed Oil		С	D	Methyl Bromide		D	D	suitable for intermittent s		com-	
Creosote		D	D	Methyl Ethyl Ketone		D	D	mended for continuous se			
Cresol		С	D	Methylene Chloride		D	D	D-Unsatisfactory s	ervice.		
Crysylic Acid		D	D	Mineral Oil				Not recommended.			

All ratings apply to concentrated or saturated solutions unless otherwise specified.

Chemical resistance ratings are based upon information supplied by the raw material manufacturers. Use as a general guide only – samples should be tested by user under actual conditions.

