Classification criteria

EN ISO 1716 Calorific value	EN 50399 Heat release in fire	EN 50399 No fire propagation	EN 60332-1-2 No flame propagation	Class	Building safety	Flammability properties	Class
X				Aca	very high	non-flammable	Aca
	X	X	X	B1ca	very high	hardly inflammable, very low heat release	B1ca
	X	X	X	B2ca	very high	hardly inflammable, low heat release	B2ca
	X	X	X	Cca	high	normally inflammable, low heat release	Cca
	X		X	Dca	medium	normally inflammable, medium heat release	Dca
			X	Eca	low	normally inflammable, no flame propagation	Eca
			X	Fca	low	no limitations	Fca

Additional classification
only for classes B1ca, B2ca, Cca and Dca

Class	EN 50399 Smoke emission (s)	EN 61034 Smoke density (s)	EN 50399 Burning droplets (d)	EN 60754-2 Acidity (a)
Aca	—	—	—	—
B1ca	s1, s1a, s1b, s2, s3	s1, s1a, s1b, s2, s3	d0, d1, d2	a1, a2, a3
B2ca	s1, s1a, s1b, s2, s3	s1, s1a, s1b, s2, s3	d0, d1, d2	a1, a2, a3
Cca	s1, s1a, s1b, s2, s3	s1, s1a, s1b, s2, s3	d0, d1, d2	a1, a2, a3
Dca	s1, s1a, s1b, s2, s3	s1, s1a, s1b, s2, s3	d0, d1, d2	a1, a2, a3
Eca	—	—	—	—
Fca	—	—	—	—

s1 = low smoke formation
s1a = little smoke, light transmission > 80%
s1b = little smoke, light transmission > 60% < 80%
s2 = medium smoke formation
s3 = unlimited smoke formation possible

d0 = no burning droplets / particles
d1 = short-time burning droplets / particles
d2 = unreserved drip-off possible

a1 = slightly corrosive fumes
a2 = medium corrosive fumes
a3 = heavily corrosive fumes