silicone rubber **selection guide**

Schwerdtle

Schwerdtle's proprietary line of silicone rubber compounds is designed to transfer sharp images over a wide range of hot stamping applications. This guide will help you select the best silicone rubber compound for your particular job. If you need assistance, please call our customer service representatives toll free: (800) 535-0004.

TYPE OF DECORATION/ARTWORK	DESCRIPTION OF PLASTIC PART & SURFACE TO BE STAMPED	SILICONE RUBBER COMPOUND SERIES–DUROMETER
Vertical stamping fine detail or small lettering	Parts are consistent and smooth (free of sinks and irregularities); flat or contoured	"C"–85, 95
Vertical stamping fine detail or small lettering	Parts are inconsistent and/or have slight surface sinks and/or irregularities; flat or contoured	Dual Durometer C-95 face / A-60 backing
Vertical stamping heavy detail or bold lettering	Parts are consistent and smooth (free of sinks and irregularities); flat or contoured	"A"–70, 80
Vertical stamping heavy detail or bold lettering	Parts are inconsistent and/or have slight surface sinks and/or irregularities; flat or contoured	"A"–70, 80, 90
Vertical stamping heavy detail or bold lettering combined with fine detail/lettering in same decoration	Please send sample parts and artwork for our evaluation	We will make recommendation after evaluation.
Roll marking with flat die on cylindrical parts (chain drive peripheral tube stamping)	Parts are consistent and smooth; cylindrical parts	"C"–85, 95
Roll marking with flat die on cylindrical parts (chain drive peripheral tube stamping)	Parts are inconsistent and/or have slight surface sinks and/or irregularities; cylindrical parts	"A"–80 *or* Dual Durometer C-95 face / A-60 backing
Thermal Transfers (decals)	Please send sample parts and information on type of transfers, and hot stamping press.	We will make recommendation after evaluation. Usually "B"–60, 80
Tip stamping raised letters, designs or lines	Parts are consistent and smooth	"A"–60, 70
Roll stamping heat transfer decals or patterned foil	Flat surfaces or contoured extrusions	"A"–70

SILICONE RUBBER PROPERTIES RATING GUIDE*

SCHWERDTLE COMPOUND SERIES	DUROMETER	THERMAL CONDUCTIVITY	THERMAL STABILITY	RESILIENCE	TOUGHNESS
"A" STANDARD RED	40	4	2	1	1
	50	3	2	1	1
	60	2	2	2	2
	70	2	2	3	2
	80	2	2	3	2
	90	2	2	3	2
"B" HI-CONDUCTIVE BROWN	60	1	2	2	3
	70	1	2	2	3
	80	1	2	3	4
	90	1	2	3	4
"C" HI-TEMPERATURE BROWN	85	2	1	3	3
	95	2	1	3	3

**Ratings are from 1 to 4; 1 is the highest, 4 is the lowest*

DEFINITIONS

DUROMETER: Hardness of rubber.
THERMAL CONDUCTIVITY: Ability of rubber to conduct heat; permits faster production rates and/or lower operating temperature at press.
THERMAL STABILITY: Ability of rubber to withstand heat without breaking down.
RESILIENCE: Ability of rubber to resist taking a set.
TOUGHNESS: Tear strength; resistance to chipping, cracking, breaking.

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