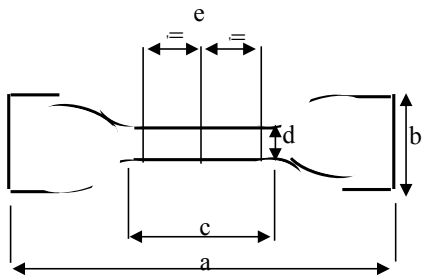
Top Glove, Top Quality, Top Efficiency
Good Health, Safety First & Be Honest
QA Department
Dumbbell Die Specification and Aging Method Guideline (01-00)

a. Dumbbell Specification



Standard Reference	ASTM D3578	ASTM D6319	ASTM D3577	ASTM D4679	NBR 13392 (ABNT)		ISO 11193/ KS ISO 11193		ISO 10282	MCAZ Zimbabwe		AS/NZS 4011		AS/NZS 4179	EN 455:2		
Glove Type	NR	NBR	NR SG	NR/NBR	NR	NBR	NR	NBR	NR SG	NR	NBR	NR	NBR	NR SG	NR	NBR	NR SG
Dumb bell reference	ASTM D412						ISO 37								ASTM D412		
	Type C						Type II								Type D		
Overall length(mm) / a	min 115						min 75								min 100		
Overall width (mm) / b	25±1						12.5±1								16±1		
Narrow length (mm) / c	33±2						25±1								33±2		
Narrow width (mm) / d	6±0.05						4±0.1								3±0.05		
Test length (mm) / e	25±0.25						20±0.5								25±0.25		
Thickness (mm)	median				average		median								average		

b. Aging Method

Standard Reference	ASTM D3578	ASTM D6319	ASTM D3577	ASTM D4679	NBR 13392 (ABNT)		ISO 11193		ISO 10282	MCAZ Zimbabwe		AS/NZS 4011		AS/NZS 4179	EN 455:2		
Glove Type	NR	NBR	NR SG	NR/NBR	NR	NBR	NR	NBR	NR SG	NR	NBR	NR	NBR	NR SG	NR	NBR	NR SG
Aging Reference	ASTM D573						ASTM D573								EN 455:2		
Aging Temperature / Period	70±2 °C /166±2 Hrs 100±2 °C /22±0.3 Hrs						70±2 °C / 168±2 hrs								70±2 °C / 168±2 hrs		
Aging Method	1-Cut Sample 2-Hanging Test Piece without touching each other 3-Conduct Test						1-Cut Sample 2-Hanging Test Piece without touching each other 3-Conduct Test								1-pack in inner 2-aging in oven 3- conduct test		

c. Requirements

Standard Reference		ASTM D3578	ASTM D6319	ASTM D3577	ASTM D4679	NBR 13392 (ABNT)		ISO 11193/ KS ISO 11193		ISO 10282	MCAZ Zimbabwe		AS/NZS 4011		AS/NZS 4179	EN 455:2		
Glove Type		NR	NBR	NR SG	NR/NBR	NR	NBR	NR	NBR	NR SG	NR	NBR	NR	NBR	NR SG	NR	NBR	NR SG
Tensile Strength (Mpa)	Before Aging	18	14	24	10	21	12						21	12	23			
	After Aging	14	14	18	7.5	16	9						16	-	17			
Force at Break (N)	Before Aging							7	7	12.5	7	7				6	6	12
	After Aging							6	7	9.5	6	7				6	6	9
Elongation (%)	Before Aging	650	500	750	500	700	500	650	500	700	650	500	700	300	700			
	After Aging	500	400	560	375	500	350	500	400	550	500	400	500	-	560			
Disposition		Acc : 1 Rej : 2														median		

Prepared by,	**Verified by,**	**Approved by,**
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