

GENERAL GUIDE FOR GLOVE RECOMMENDATIONS CONCERNING HEAT APPLICATIONS

Variables Affecting Recommendation:

- 1) Temperature
- 2) Duration of time to hold object
- 3) Weight of object handled
- 4) How much dexterity is needed

Types of heat:

- 1) Radiant – generated by a source of fire or by the sun.
- 2) Ambient – the surrounding atmospheric temperature.
- 3) Conductive – direct contact with hot surfaces.

NOTE: *The weight and construction of the outer layer of material has a bearing on the amount of abrasion a glove can take.*

As a general rule: CHORES/DOUBLE PALMS - recommended up to 200 degrees;

HOT MILLS - recommended up to 400 degrees

RATING FOR DRY HEAT: E - Excellent G - Good F - Fair

NOTE: *This is a GUIDE only. Due to the variables which affect glove performance, we recommend testing higher weights first to determine the most appropriate style.*

Temp Range (Fahrenheit)	Holding Cycle	MGC Item #	Glove Recommendation	Rating	
				Heat	Abrasion
200° – 250°	0 – 30 sec	9400KM	Reg. Wgt Seamless Terry Cloths	E	E
		8526C/9018/ 9018B/9118G	16020 oz. All Cotton Double Palms & Chores	E	G
		9124	20-22 oz. Economy all Cotton Hot Mills	E	G
		8300C/8300W	12 oz. Single Ply all Cotton Canvas	F	F
		1200/1200S/ 1230 Series	Leather Palm Glove Economy Grades	G	G
		1211/1212/ 1230DP	Double Leather Palm Economy Grades	G+	E
250° – 300°		9128/9428/9428B 9428GFR/9429 9432G11 9440KM	100% Kevlar® Terry Cloth, 24oz all Cotton Hot Mills	E	G
		1300/1350/ 1400A Series	Leather Palm Glove Select Shoulder Grades	G	E
		1311/1361/ 1411A Series	Double Leather Palm Select Shoulder Grades	G+	E+
300° - 400°	0 – 40 sec	9132K/9132/9132G	28-32oz all Cotton Hot Mills	G	G
		9432GXL/9432XL 9432SFR/9442P 9433	Cut-n-Sewn Terry cloth	G	E
		1713/1714	¾ or Full Leather Back, Leather Palm, Select Side Grades	G	E
		1711/1712	Double Leather Palm, Select Side Grades	G+	E+
		1702/1700K	Kevlar® Lined Leather Palm	E+	E
		4550/4550W	Leather Foundry Glove	G+	E
400° - 500°		4750	High Heat Leather	E+	E
		9432GFR/9432P	Cut-n-Sewn Terry cloth	E+	E
482°	17 sec	9136K	Hot Mill 3-Ply Burlap	G+	G+
482° - 662°	18 – 14 sec	9460K/9450K	2-Ply Nitrile Block Terry	E+	E+

Note: *This is a Guide only. Due to the variables which affect glove performance, we recommend testing high weights first to determine the most appropriate style.*

GLOVES FOR FOOD PROCESSING APPLICATIONS

USDA - United States Department of Agriculture

FDA - Food and Drug Administration

The FDA publishes a list of approved ingredients for the makeup of "articles (Gloves) intended for repeated use...in producing, manufacturing, packing, processing, preparing, treating, packaging, transporting, or holding food". This information is in the Code of Federal Regulations 21 CFR, Parts 170-199.

If a glove is manufactured with the FDA accepted ingredients listed in 21 CFR, Parts 170-199, you may advertise your product as "component materials comply with FDA regulations for food contact".

In the past, all products intended for direct food contact had to be manufactured with FDA accepted ingredients, and they had to be formally approved by the USDA. The procedure has now changed due to the liability involved. Self-certification of compliance with FDA materials is now acceptable.

WHAT IS MEDICAL GRADE?

The FDA is responsible for determining whether or not a glove is suitable for medical applications. In our industry, we refer to certain gloves as being "Medical Grade". This means that a glove has met FDA guidelines for classification as a CLASS I medical device. These types of gloves have a variety of applications including physical examinations and handling pharmaceuticals. The gloves that we market as medical grade are non-sterile.

In order to market a glove as medical grade, you must submit a pre-market notification [510(K)] to the FDA. A [510(K)] application consists of several detailed questions, and it requires that two tests be performed and results listed. The first test is the FDA 1000 ml. water test that determines whether pinholes are present. The second test is A.S.T.M. D3578-77 that tests the physical properties of the glove. The physical properties that have to be recorded are Tensile Strength, Ultimate Elongation, and Modulus of Elasticity at 300% Elongation.

If the FDA accepts the performance of your glove, you are issued FDA registration numbers, and you may advertise your glove as medical grade or FDA 510 (K) compliant. The FDA will not allow you to market your product as FDA Approved due the liability involved.