# MATERIAL SAFETY DATA SHEET

## 1) PRODUCT IDENTIFICATION

Product Name : Nitrile Powder-Free Exam Gloves

Chemical Family : Nitrile Chemical Name : None

Chemical Hazard rating : Health 1

: Flammability 0 : Reactivity 0

## 2) HAZARDOUS INGREDIENTS

No significant hazardous ingredients.

Chemical Composition: Acrylonitrile Butadiene Rubber Nitrile Latex, Zinc Oxide, Zinc Dibutyldithiocarbamate, Antioxidant, Sulfur, Titanium Dioxide.

### 3) PHYSICAL DATA - Composition

Nitrile Latex	95.0 - 98.0%
Ammonium	0.01 - 0.20%
Teric 320	0.10 - 0.20%
Zinc Oxide	1.8% - 2.80%
ZDEC (Zinc diethyldithiocarbamate)	0.50% - 1.20%
Sulphur	0.60 - 1.30%
Titanium Dioxide	2.0% - 3.0%
Potassium Hydroxide	0.50 - 0.80%

A coagulant additive is used as mould release agent It is used as a lubricant on gloves to facilitate stripping of gloves and Polymer is used to reduce the friction of the inside of gloves, and to make donning easier.

## 4) FIRE AND EXPLOSION

Stability: Stable. Material will not support combustion.

Extinguishing Media: Foam, Carbon Dioxide, Dry Powder, Water Spray

### 5) REACTIVITY DATA

**Stability:** Stable when stored in dry and cool room.

**Hazardous Polymerization:** None.

**Conditions to Avoid:** Freezing and extreme heat.

**Incompatibility (Materials to Avoid):** Hydrocarbon solvents and some types or oil.

Hazardous Decomposition Products: Oxides of carbon, nitrogen and sulfur.

## 6) First Aid Procedure:

If systemic reactions occur, discontinue use and seek emergency treatment.

### 7) PRECAUTION

This product contains Acrylonitrile Butadiene Rubber which may cause allergic reactions. Other components used in making gloves may also cause allergic reactions in some individuals. If user or a patient are allergic to Nitrile or experience any discomfort, discontinue use immediately and consult with a physician.

Do not reuse gloves. They are not intended for use as a chemical barrier

## 8) Storage

Store in original packing in a cool, dry and well ventilated area, away from dust, sunlight, moisture, X-ray, and excessive heat above 100°F (37°C).



Date:

GloveTex Co. Ltd - Specification

11 Moo 5, Soi Klongmadue 17, Selthakij Rd., Donkaidee, Krathumban, Samutsakhon, Thailand, 74110

DE333-110, DE 334-110, DE 344-110

June 1, 2010

Revision:

0



Name: Glovetex Food Grade Nitrile Glove - SkinPro, NitriHand

Description: Nitrile powder free gloves, straight finger, ambidextrous mold with non-

slip/textured finish at fingertip, beaded cuff, 9" nominal length, box packed.

Use: Provide products or processes in food and clean manufacturing application

with contamination protection resulting from direct handling or incidental

exposure by a worker's hand.

Sold as Sterile

No

CE Marked Yes

FDA Regulated | Yes

Contains Natural Latex | No

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REQUIRED: YES/NO

Traceable to component items/materials Yes

Certificate of Conformance/Analysis Yes

Yes Specified attributes, variables, or other requirements

Yes Special considerations

All sampling for these gloves will follow ISO 2859-1 (current edition) Sampling:

Sampling Procedures for Inspection by Attributes.

#### 1.0 ATTRIBUTES (VISUAL DEFECTS):

Product will be inspected for defects as defined below. The sample unit shall be the individual glove.

#### 1.1 Critical Defects (1.5-2.5 AQL)

- Foreign Material: Wood splinters, glass, hair, or other foreign material present on or 1.1.1 embedded in the sample.
- 1.1.2 Film Uniformity: Any tears or pinholes in the glove.

#### 1.2 Major Defects (2.5 AQL)

- Film Uniformity: Any thin or thick spots/streaks, bubbles, drips, coagulum >3 mm large. 1.2.1
- Surface Tackiness: Film sticking together to inhibit proper donning, blocking, bricking, 1.2.2 sticky pleats>10 mm.
- 1.2.3 Bead Formation: Any pinched/rolled cuffs.

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1.2.4	Color: Discoloration/staining > 1 mm.
1.2.5	Wetness: Any wetness on or inside the glove.
1.2.6	Overturn: Gloves not overturned.
1.2.7	Incorrect Size: Any glove within a batch not having the proper size for that batch.
1.2.8	Product Cleanliness: Any dirt, grease, or other contaminant on glove.
1.3 <u>Mir</u>	nor Defects (4.0 AQL)
1.3.1	Film Uniformity: Thick spots or coagulum < 3 mm large.
1.3.2	Surface Tackiness: Sticky pleats <10 mm.
1.3.3	Bead Formation: Gaps, tears, inconsistent shape.
1.3.4	Color: Discoloration or inconsistent glove to glove; stain, shiny spots.

### 2.0

<u>VARIABLES (PHYSICAL PROPERTIES)</u>:
Product will be tested for conformance to acceptance limits as defined below. The sample unit shall be the individual glove.

#### 2.1 Critical Defects (1.5-2.5 AQL or as specified)

	<u>Property</u>	<u>Units</u>	<u>Minimum</u>	TARGET	Maximum	Test Method Current Edition
2.1.1	Watertightness	NA		0	pass	ASTM D 5151 EN 455-1
2.2 <u>M</u>	ajor Defects (2.5 AQL)					
2.2.1	Tensile Strength Before aging	MPa	22.0	30.0		ASTM D 412 ASTM D 573 ASTM D 6319
2.2.2	Ultimate elongation Before aging	%	600	700	*	ASTM D 412 ASTM D 573 ASTM D 6319
2.2.1	Tensile Strength After aging	MPa	21.0	30.0		ASTM D 412 ASTM D 573 ASTM D 6319
2.2.2	Ultimate elongation After aging	%	500	600	G/	ASTM D 412 ASTM D 573 ASTM D 6319
2.2.3	Median Force at Break Before aging	Newtons	5	7		EN 455-2

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	<u>Property</u>	<u>Units</u>	<u>Minimum</u>	TARGET	<u>Maximum</u>	Test Method Current Edition
2.2.4	Palm Width: X-small	mm	70	75	80	ASTM D 6319 EN 455-2
	Small		80	85	90	
	Medium		90	95	100	
	Large		105	105	110	
	X-large		105	111	120	
2.2.5	Thickness:	mm				ASTM D 6319
2.2.0	Middle finger	3mil	0.07	0.09	0.11	AOTW D 0019
	Palm	3mil	0.05	0.07	0.09	
	Cuff	3mil	0.04	0.06	0.08	
	Middle finger	4mil	0.10	0.12	0.14	
	Palm	4mil	0.08	0.10	0.11	
	Cuff	4mil	0.06	0.08	0.10	
	Middle finger	5mil	0.11	0.13	0.15	
	Palm	5mil	0.09	0.11	0.13	
	Cuff	5mil	0.08	0.10	0.12	
2.2.6	Length:	mm				ASTM D 6319
	9"		240	245	250	EN 455-2

### 3.0 PACKAGING/LABELING/PREPARATION FOR DELIVERY (1.5 AQL):

Product will be inspected for defects as defined below. The sample unit shall be the individual shipping container. All product must conform to the current packaging standard for this product.

3.1 <u>Mismatched Label and Contents</u>: Shipping container label and container contents do not agree. Inner package label does not agree with contents and with outer container label.

### 4.0 SPECIAL CONSIDERATIONS:

4.1 <u>Surface</u>: Powder-free, <2mg/glove

### MSDS for Nitrile Gloves

#### 1. PRODUCT AND COMPANY IDENTIFICATION

1.1. Trade name: Disposable Nitrile Glove, Powder Free, Blue color and Violet color

1.2. Application: Gloves for single use

1.3. Producer / dealer: Intco Medical Products Co., Ltd.

Address: No. 18 Qingtian Road Qilu Chemical Industry Park, Zibo, China

Tel: +86-533-7527018

#### 2. COMPOSITION / INFORMATION OF INGREDIENTS

Butadiene-acrylonitrile Copolymer Latex (NBR Latex)

Colorants for tinting paints/coatings

#### 3. HAZARD IDENTIFICATION

not applicable

#### 4. FIRST AID MEASURES

not required

### 5. FIRE FIGHTING MEASURES

In case of fire unidentified toxic and/or irritating vapours/gases can arise

Extinguishing media: CO2, Foam, Dry extinguishing powder, Waterspray jet

#### 6. ACCIDENTAL RELEASE MEASURES

not applicable

#### 7. HANDLING AND STORAGE

Store in a dry, ventilated area

Avoid direct sunlight, fluorescent lighting, heat and moisture

Do not store above 100°F (38 °C)

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

not applicable

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Color: Blue Violet

Odor: N/A
Physical state, odour: solid
Boiling point/range: not applicable
Flash point: not determined
Specific gravity: ~ 1.1 g/cm<sup>3</sup>

#### 10. STABILITY AND REACTIVITY

Stable under recommended storage and handling conditions. Hazardous decomposition products depend upon temperature, air supply and the presence of other materials.

Materials/conditions to avoid: at temperatures > 200°C decomposition starts

Hazardous decomposition products: hydrochloric acid (HCI), carbon monoxid (CO) and other toxic

substances

#### 11. TOXICOLOGICAL INFORMATION

Inhalation: not applicable

Skin contact: material is not hazardous

Eye contact: not applicable Ingestion: not applicable

#### 12. ECOLOGICAL INFORMATION

The material is practically insoluble in water and is not expected to biodegrade.

#### 13. DISPOSAL CONSIDERATIONS

EWC-Code: 07 02 13

Disposable according to national regulations.

#### 14. TRANSPORT INFORMATION

ADR/RID: not a dangerous load not a dangerous load ICAO: not a dangerous load un-No.: not a dangerous load

### 15. REGULATORY INFORMATION

Symbol: none R-phrases: none S-phrases: none

### 16. OTHER INFORMATION

This listing of legal regulations is related to the valid version.