# PRODUCT SAFETY DATA SHEET NITRILE EXAM POWDERED AND POWDER-FREE

## SECTION I : PRODUCT DESCRIPTION

Product Name : Nitrile Examination Glove [Powdered and Powder-Free]

Chemical Family : Synthetic Nitrile

### SECTION II : COMPOSITION / MAIN RAW MATERIAL

**<u>Powdered</u>**: Nitrile Latex, ZDBC, ZDEC, Zinc Oxide, Sulphur, Titanium Dioxide, Potassium Hydroxide, Aquawax and Color pigment.

**<u>Powder-Free</u>**: Nitrile Latex, Potassium Hydroxide, Aquawax, ZDBC, ZDEC, Zinc Oxide, Wingstay-L, Sulphur, Titanium Dioxide and Color pigment.

### SECTION III : MAIN CHARACTERISTICS

A. Elastic and flexible

b. Use as protection method

### SECTION IV : POSSIBLE HAZARDS DUE TO USE OF PRODUCTS

The use of the products may cause the following possible hazards.

- 1. Transmission of disease 2. Skin irritation
- 3. Discomfort during using of product 4. Contamination

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# SECTION V : PREVENTION BY THIS COMPANY TO AVOID CONSEQUENCES DUE TO HAZARDS

The following steps have been taken to avoid/reduce the possibility of causing hazards.

#### **1.0 TRANSMISSION OF DISEASES**

- a. Causes
  - Can be caused by pinholes. In any shipment of latex gloves, it may contain a few gloves with pinholes. If the pinholes are bigger, it can be visually observed by putting on the hand or by blowing the glove with the air. If the pinhole is found, the particular piece needs to be discarded to avoid transmission of disease. Contaminated glove could also transfer disease. Please refer to item "IV" for prevention action to be taken.
  - Can be caused by short length.

#### b. Preventions

- Top Glove has implemented ISO 9001: 2008 quality management system for the consistency and improvement of the quality.
- The system include quality test at various stages of production from preproduction during production and post production test.
- Top Glove also appoints an independent inspector to inspect consignment before delivery to customers.
- The physical properties of this company's glove not only meet international standard but exceed these standards which prevent tearing and other problems caused when wearing the gloves.
- Glove consignment that fails the random test will be checked 100% i.e. every single piece of glove will undergo QC process to ensure that only good glove will reach our customer and the default gloves are disposed off.

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#### 2.0 SKIN IRRITATION

a. Causes

Can be caused by chemical on the gloves

b. Prevention

Top Glove used only chemical, that are approved for usage in the production of gloves. Top Glove does not use chemicals that are known or suspected to cause skin irritation. A test is performed to determine if the chemicals were leached out properly after production or not. Top Glove has good (reasonable temperature) and long leaching system thereby these chemicals are washed from gloves during production. The leaching tanks water is systematically regulated to allow proper washing off of chemicals.

#### 3.0 DISCOMFORT DURING USING OF GLOVES

a. Cause

Can be caused by the wearing of wrong size of gloves.

b. Prevention

Top Glove has five sizes from extra small, small, medium, large and extra large to meet the various requirement from users. All sizes are within a small tolerance limit. There is no mixing of size in each box of gloves.

### 4.0 CONTAMINATION

a. Cause

Can be caused by micro-organism and chemicals in the gloves.

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#### b. Prevention

Top Glove has long leaching facilities to wash off the micro-organisms and chemicals. Gloves are sending out regularly to the independent laboratory to test the level of contamination. Feed back from these tests are analyzed and production formulations are revised to prevent recurrence. Top Glove requires suppliers to give us the certificate of analysis regarding the micro-biological quality for every batch of corn-starch that they supplied to us. Proper storage of corn-starch is stored in dry place and closed container to avoid contamination. Fresh gloves from the production lines are put in the basket, stacked-up and stored in a dry and cool place.

#### SECTION VI : ADEQUACY OF SAFETY MEASURE

Top Glove has taken steps to identify & analyze all possible risk that may result from the use; thereby ensuring the gloves from Top Glove is safe for usage by the public. Those gloves that do not comply with the above are re-inspected, i.e. individually gloves are checked and only those compliance gloves will be shipped out.

### **SECTION VII : HANDLING OF PROBLEM**

The risk analysis is continuous process. Any test or customers complaint regarding the risk analysis problem will be handled by QA department to find out the cause of the problem and the solution for it. The procedures will be updated accordingly to solve the problem and this will be added into the risk analysis.

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Prepared By: RA Department Verified By: Mr. Puon Tuck Seng Deputy General Manager