# glove@n Paloma

# **Nitrile Exam Gloves Powder Free, Standard Cuff**

Like the purity of a white Dove, **Paloma**, our white nitrile gloves offers the elegance of touch and feel with strength and dexterity needed for the delicate procedure and jobs.

|                              | GloveOn          | Paloma       |
|------------------------------|------------------|--------------|
| Length (mm)                  |                  |              |
|                              | ≥ 2              | 30           |
| Thickness Measurements (mm)  |                  |              |
| Palm (centre of Palm)        | 0.07 <u>+</u>    | 0.02         |
| Finger (13mm ± 3mm from tip) | 0.09 <u>+</u>    | 0.02         |
| Physical Properties          | Before Ageing    | After Ageing |
| Tensile Strength (MPa)       | ≥ 18             | ≥ 16         |
| Elongation (%)               | ≥ 500            | ≥ 400        |
| Inspection Levels & AQL      | Inspection Level | AQL          |
| Watertightness               | G1               | 1.50         |
| Physical Dimensions          | S2               | 4.00         |
| Tensile Strength             | S2               | 4.00         |
| Visual Inspection (Major)    | S4               | 2.50         |
| Visual Inspection (Minor)    | S4               | 4.00         |
| Particulate Residue          | N = 5            | ≤ 2mg/glove  |

77 (6

Nitrile Powder Free Examination Gloves ARTG 164563

A brand by

# Carmustine (BCNU), 3.3mg/ml (3,300 ppm) Cisplatin, 1.0mg/ml (1,000 ppm) Cyclophosphamide (Cytoxan), 20.0mg/ml (20,000 ppm) Dacarbazine (DTIC), 10.0mg/ml (10,000 ppm) ubicing Lludrophloride 20mag/mal (2000

gloveer

Paloma

002

R

glovee

Glove

| Doxorubicin Hydrochloride, 2.0mg/ml (2,000 ppm) | >240 minutes |
|---|--------------|
| Etoposide (Toposar), 20.00mg/ml (20,000 ppm)    | >240 minutes |
| Fluorouracil, 50.0mg/ml (50,000 ppm)            | >240 minutes |
| Methotrexate, 25.0mg/ml (25,000 ppm)            | >240 minutes |
| Mitomycin C, 0.5mg/ml (500 ppm)                 | >240 minutes |
| Paclitaxel (Taxol), 6.0mg/ml (6,000 ppm)        | >240 minutes |
| Thiotepa, 10.0mg/ml (10,000 ppm)                | 15.4 minutes |
| Vincristine Sulfate, 1.0mg/ml (1,000 ppm)       | >240 minutes |
|   |              |

WARNING: Carmustine and Thiotepa, at the tested concentration, degraded Paloma nitrile glove at 15.1 minutes and 15.4 minutes, respectively. The safe use of gloves in chemotherapy treatment is solely the decision of clinicians authorised to make such decision.

## **REORDER CODE**

NTR51XS X-SMALL NTR51SS SMALL NTR51MM MEDIUM NTR51LL LARGE NTR51XL X-LARGE

## **FEATURES**

- Fingertip textured
- Powder free
- Not made with natural rubber latex
- Chemo drugs tested
- Lab chemical tested
- Ambidextrous
- Standard cuff
- White colour

## PACKAGING

200 gloves per box for XS to L 180 gloves per box for XL 10 boxes per carton

## **REGULATORY COMPLIANCE**

TGA - ARTG 164563, FDA 510(k). MDD 93/42/EEC, REACH, ROHS Directive 2002/95/EC, EC 10/2011, REGULATION (EC) No 1935/2004, PPE 89/686/EEC

## **STANDARDS**

15.1 minutes

>240 minutes

>240 minutes

>240 minutes

ASTM D6319, EN 455 part 1, 2, 3 & 4, EN 1186, EN 13130, CEN/TS 14234, EN 420, EN 374 part 1, 2 & 3

#### MANUFACTURING ACCREDITATIONS

ISO 9001:2008 ISO 13485:2003 EN ISO 13485:2003

| Chemotherapy Drugs and Concentration                 |
|--|
| (Tested for Resistance to Permeation by Chemotherapy |
| Drugs as per ASTM D6978-05 Test Report PN 116668)    |

Minimum Breakthrough Detection Time (minutes)

| Carmustine (BCNU), 3.3mg/ml (3,300 ppm)            | Not Recommended |
|--|-----------------|
| Cisplatin, 1.0mg/ml (1,000 ppm)                    | >240 minutes    |
| Cyclophosphamide (Cytoxan), 20.0mg/ml (20,000 ppm) | >240 minutes    |
| Dacarbazine (DTIC), 10.0mg/ml (10,000 ppm)         | >240 minutes    |
| Doxorubicin Hydrochloride, 2.0mg/ml (2,000 ppm)    | >240 minutes    |
| Etoposide (Toposar), 20.00mg/ml (20,000 ppm)       | >240 minutes    |
| Fluorouracil, 50.0mg/ml (50,000 ppm)               | >240 minutes    |
| Methotrexate, 25.0mg/ml (25,000 ppm)               | >240 minutes    |
| Mitomycin C, 0.5mg/ml (500 ppm)                    | >240 minutes    |
| Paclitaxel (Taxol), 6.0mg/ml (6,000 ppm)           | >240 minutes    |
| Thiotepa, 10.0mg/ml (10,000 ppm)                   | Not Recommended |
| Vincristine Sulfate, 1.0mg/ml (1,000 ppm)          | >240 minutes    |

Warning: Don't use with Carmustine and Thiotepa

# Features

- Fingertip textured
- Powder free
- Not made with natural rubber latex
- Chemo drugs tested
- Lab chemical tested
- Ambidextrous
- Standard cuff
- White colour



- X-Small
- Small
- Medium
- Large
- X-Large

# Manufacturing Accreditations

- ISO 9001:2008
- ISO 13485:2003
- EN ISO 13485:2003



MDSS GmbH Schiffgraben 41,30175 Hannover, Germany



MDA Reg No. GMD5635368418A

# **Certificates FDA**



April 25, 2020

Hartalega NGC SDN, BHD, Nurul Kong Senior Manager- Quality Assurance Kawasan Perindustrian Tanjung Sepang, Selangor 43900 Malaysia

Re: K200581

Trade/Device Name: Paloma Nitrile Powder Free Examination Gloves (Blue) Regulation Number: 21 CFR 880.6250 Regulation Name: Paloma Powder Free Examination Glove Regulatory Class: Class I, reserved Product Code: LZA, LZC, QDO Dated: February 27, 2020 Received: March 5, 2020

Dear Nurul Kong:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. Although this letter refers to your product as a device, please be aware that some cleared products may instead be combination products. The 510(k) Premarket Notification Database located at <a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm</a> identifies combination product submissions. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal

U.S. Food & Drug Administration 10903 New Hampshire Avenue

Silver Spring, MD 20993

www.fda.pov

2K200581 - Nurul Kong

statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical devicerelated adverse events) (21 CFR 803) for devices or postmarketing safety reporting (21 CFR 4, Subpart B) for combination products (see <u>https://www.fda.gov/combinationproducts/guidance-regulatory-information/postmarketing-safety-reporting-combinationproducts); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820) for devices or current good manufacturing practices (21 CFR 4, Subpart A) for combination products; and, if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.</u>

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <a href="https://www.fda.gov/medical-devices/medical-device-reporting-mdr-how-report-medical-device-problems">https://www.fda.gov/medical-device-reporting-mdr-how-report-medical-device-problems</a>.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance) and CDRH Learn (https://www.fda.gov/training-and-continuing-education/cdrh-learn). Additionally, you may contact the

Division of Industry and Consumer Education (DICE) to ask a question about a specific regulatory topic. See

the DICE website (https://www.fda.gov/medical-devices/device-advice-comprehensiveregulatory-

assistance/contact-us-division-industry-and-consumer-education-dice) for more information or contact DICE

by email (DICE@fda.hhs.gov) or phone (1-800-638-2041 or 301-796-7100).

Sincerely, Elizabeth F. Claverie -S



CAPT Elizabeth Claverie, M.S. Assistant Director DHT4B: Division of Infection Control and Plastic Surgery Devices OHT4: Office of Surgical and Infection Control Devices Office of Product Evaluation and Quality Center for Devices and Radiological Health Page

# **Certificates CE**

# Certificate of CE-Registration

This is to certify that, in accordance with the Medical Device Directive 93/42/EEC, Medical Device Safety Service GmbH (MDSS) agrees to perform all duties and responsibilities as the Authorized Representative for:

# Hartalega NGC Sdn. Bhd. No. 1, Persiaran Tanjung Kawasan Perindustrian Tanjung 43900 Sepang, Selangor MALAYSIA

as stipulated and demanded by the aforementioned Directive. The German Competent Authority has allocated the medical devices of the Manufacturer registration numbers as foreseen in:

## Annex A dated January 18, 2019

The Manufacturer has provided MDSS with the appropriate Declaration(s) of Conformity confirming that the medical devices fulfill the applicable requirements of Directive 93/42/EEC. In compliance with German law, a safety officer has been appointed for Germany.

2019-01-18

President MDSS GmbH

MDSS - Medical Device Safety Service - Schiffgraben 41 - 30175 Hannover, Germany



MDSS - Schilfgraben 41 · 30175 Hannover, Germany

Hartalega NGC Sdn. Bhd. Khairunnisa Warsito No. 1, Persiaran Tanjung Kawasan Perindustrian Tanjung 43900 Sepang, Selangor MALAYSIA Schiffgroben 41 30175 Hannover, Germany

Tel: + 49 · 511 · 62 62 86 30 Fox: + 49 · 511 · 62 62 86 33

> eMail: info@mdss.com Internet: www.mdss.com

> > 2019.01.18

#### Confirmation of CE Registration

Dear Khairunnisa,

It is our pleasure to enclose the new Certificate of CE-Registration for your product.

Please note that registration was performed under § 25 MPG (Medizinproduktegesetz). This is the Federal Republic of Germany's national interpretation of Medical Device Directive 93/42/EEC. Registration is therefore in accordance with EU legislation. We remind you that all products must meet the applicable provision of the European and national regulation before they may be placed on the market.

We are looking forward to continuing our good business relationship and wish you a successful product launch in Europe.

Best regards.

Juan Monferrer Tena Administrative Assistant Medical Device Safety Service GmbH

Encl. 1 Certificate of CE-Registration 1 Annex A

MDSS - Medical Device Safety Service OmbH Handelsregister Hannover HRB 57318 - USt-IdNr, DE 177346163 - Geschäftsführen Ludger Mäller Bankverbindungen



Bankverbindungen Sparkasse Hannover S.W.I.F.T.: SPXHDE2H IBAN: DE24 2505 0180 0910 0792 77

Commerzbonk BG, Honnover S.W.I.F.T.: COBRDEFF 250 IBAN: DE67 2504 0066 0338 8816 00

# Annex A dated January 18, 2019 Manufacturer: Hartalega NGC Sdn. Bhd.

| UMDNS Code Description<br>Notified Medical Device<br>Product Name & Catalogue Number   | UMDNS<br>Code | Risk<br>Class |    | Registration<br>Number  | NB No. /<br>NB Certificate No. | NB Cert.<br>Valid Until |
|--|---------------|---------------|----|-------------------------|--------------------------------|-------------------------|
| Gloves, Examination/Treatment  | 11-882        | 1             | 10 | DE/CA09/0170/H13/001-01 | N.A.                           | NA.                     |
| Latex Examination Gloves. Nitrile Examination Gloves:<br>Antimicrobial Nitrile Power Free Examination Gloves<br>Latex Powder Free Examination Gloves<br>Latex Powdered Examination Gloves<br>Nitrile Powder Free Examination Gloves<br>Antimicrobial Nitrile Power Free Examination Gloves |               |               |    |                         |                                |                         |



# **Certificates Testing**



Testing. Development. Problem Solving.

January 5, 2019

# • TEST REPORT •

PN 83672A - Amended

# CHEMICAL ANALYTICAL SERVICES

Prepared For: Hartalega SDN. BDH Ms. Nurul Aisyah Kong No. 7 Kawasan Perusahaan Suria Bestari Jaya Selangor, 45600 Malaysia

Prepared By Tiffany L Heller Chemical Technician

Approved By:

Ana C. Barbur, M.S

Manager, Chemical & Pharmaceutical Services

An A2LA Accredited Testing Laboratory — Certificate Numbers 255.01 & 255.02 ISO 9001:2000 Registered Member of ACIL: The American Council of Independent Laboratories



ISO 9001:2000



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# Testing. Development. Problem Solving.

January 5, 2019

Ms. Nurul Aisyah Kong Hartalega SDN. BHD

Page 1 of 3 - PN 83672A - Amended

SUBJECT: Permeation testing per ASTM D 6978-05 on sample submitted by the above company. Wire Transfer.

RECEIVED: Glove sample identified as Nitrile Powder Free Examination Gloves (Blue) Code: ABLU.

#### TESTING CHEMOTHERAPY DRUGS:

Table 1. List of the Testing Chemotherapy Drugs, Sources, and Expiration Dates

| TESTING CHEMOTHERAPY DRUGS | DRUG SOURCE                                   |
|----------------------------|---|
| Carmustine (BCNU)          | Sigma; Lot# 038K4008; Expiration 12/2009      |
| Cisplatin                  | Sigma; Lot# 59H3657; Expiration 09/2009       |
| Cyclophosphamide (Cytoxan) | Sigma; Lot# 068K1131; Expiration 1/2010       |
| Dacarbazine (DTIC)         | Hospira; Lot# U022223AA; Expiration 06/2010   |
| Doxorubicin Hydrochloride  | Teva; Lot#07N625; Expiration 10/2009          |
| Etoposide (Toposar)        | Teva; Lot# 31303976B; Expiration 9/2011       |
| Fluorouracil               | APP; Lot# 203867; Expiration 03/2010          |
| Mitomycin C                | Sigma, Lot# 048K1086; Expiration 01/2010      |
| Methotrexate               | Hospira; Lot# U024457AA; Expiration 05/2010   |
| Paclitaxel (Taxol)         | Dabur Oncology; Lot# PA08H00701; Exp. 05/2010 |
| Thiotepa                   | Sigma: Lot#078K1526; Expiration 12/2009       |
| Vincristine Sulfate        | Hospira, Lot# U037139AA; Expiration 12/2009   |

#### COLLECTION MEDIA:

The collection media, which were selected, are listed in Table 2.

Table 2. Collection Media for Testing Chemotherapy Drugs

| TEST DRUG AND CONCENTRATION                       | COLLECTION MEDIUM                 |
|---|-----------------------------------|
| Carmustine (BCNU), 3.3 mg/ml (3,300 ppm)          | 10% Ethanol Aqueous Solution      |
| Cisplatin, 1.0 mg/ml (1,000 ppm)                  | Distilled Water                   |
| Cyclophosphamide (Cytoxan), 20 mg/ml (20,000 ppm) | Distilled Water                   |
| Dacarbazine (DTIC), 10.0 mg/ml (10,000 ppm)       | Distilled Water                   |
| Doxorubicin Hydrochloride, 2.0 mg/ml (2,000 ppm)  | Distilled Water                   |
| Etoposide (Toposar), 20.0 mg/ml (20,000 ppm)      | Distilled Water                   |
| Fluorouracil, 50.0 mg/ml (50,000 ppm)             | 9.20 pH Sodium Hydroxide Solution |
| Methotrexate, 25 mg/ml (25,000 ppm)               | Distilled Water                   |
| Mitomycin C, 0.5 mg/ml (500 ppm)                  | Distilled Water                   |
| Paclitaxel (Taxol), 6.0 mg/ml (6,000 ppm)         | 30% Methanol Aqueous Solution     |
| Thiotepa, 10.0 mg/ml (10,000 ppm)                 | Distilled Water                   |
| Vincristine Sulfate, 1.0 mg/ml (1.000 ppm)        | Distilled Water                   |

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Page 2 of 3 - PN 83672A - Amended

#### TESTING CONDITIONS:

Standard Test Method Used: Deviation From Standard Test Method: Analytical Method: Testing Temperature; Collection System: Specimen Area Exposed: Selected Data Points: Number of Specimens Tested: Location Sampled From: Comments/Other Conditions: ASTM D 6978-05 Used 1" Permeation Cell UV/VIS Spectrometry 35.0°C ± 2.0 Closed Loop 5.067 cm2 25/test 3/test Cuff area Magnetic stir bar was used in the sampling chamber

# DETECTION METHOD OF CHEMICAL PERMEATION; UV/VIS ABSORPTION SPECTROMETRY;

Instrument: Perkin Elmer UV/VIS Spectrometer Lambda 25

UV/VIS Absorption Spectrometry was used to measure the absorbance of test chemicals, which permeated through the specimens into the collection medium. The collection medium was circulated in a closed loop at 11 ml/minute of flow rate through the testing period. Data collection was performed according to the programmed schedule by means of UV Winlab software from the Perkin Elmer Corporation. The list of the characteristic wavelengths is shown below.

Table 3. Characteristic Wavelengths used in UV/VIS Absorption Spectrometry

| TESTING CHEMOTHERAPY DRUGS                        | WAVELENGTH (nm) |
|---|-----------------|
| Carmustine (BCNU), 3.3 mg/ml (3,300 ppm)          | 229             |
| Cisplatin, 1.0 mg/ml (1,000 ppm)                  | 199             |
| Cyclophosphamide (Cytoxan), 20 mg/ml (20,000 ppm) | 200             |
| Dacarbazine (DTIC), 10.0 mg/ml (10,000 ppm)       | 320             |
| Doxorubicin Hydrochloride, 2.0 mg/ml (2,000 ppm)  | 232             |
| Etoposide (Toposar), 20.0 mg/ml (20,000 ppm)      | 205             |
| Fluorouracil, 50.0 mg/ml (50,000 ppm)             | 269             |
| Methotrexate, 25 mg/ml (25,000 ppm)               | 303             |
| Mitomycin C, 0.5 mg/ml (500 ppm)                  | 217             |
| Paclitaxel (Taxol), 6.0 mg/ml (6,000 ppm)         | 231             |
| Thiotepa, 10.0 mg/ml (10,000 ppm)                 | 199             |
| Vincristine Sulfate, 1.0 mg/ml (1,000 ppm)        | 220             |

#### SAMPLE CHARACTERISTICS:

Table 4. Thickness characteristics for the tested specimens: Nitrile Powder Free Examination Gloves (Blue) Code: ABLU.

| Testing Chemotherapy       | T        | hickness (mr               | m)    |              | Weight/Unit Area |  |
|----------------------------|----------|----------------------------|-------|--------------|------------------|--|
| Drugs                      | Sample 1 | Sample 1 Sample 2 Sample 3 |       | Average (mm) | (g/m2)           |  |
| Carmustine (BCNU)          | 0.080    | 0.084                      | 0.082 | 0.082        | 79.2             |  |
| Cisplatin                  | 0.086    | 0.082                      | 0.088 | 0.085        | 79.2             |  |
| Cyclophosphamide (Cytoxan) | 0.087    | 0.083                      | 0.081 | 0.084        | 79.2             |  |
| Dacarbazine (DTIC)         | 0.086    | 0.080                      | 0.084 | 0.083        | 79.2             |  |
| Doxorubicin Hydrochloride  | 0.087    | 0.084                      | 0.082 | 0.084        | 79.2             |  |
| Etoposide (Toposar)        | 0.085    | 0.088                      | 0.090 | 0.088        | 79.2             |  |
| Fluorouracil               | 0.082    | 0.082                      | 0.094 | 0.086        | 79.2             |  |
| Methotrexate               | 0.081    | 0.084                      | 0.087 | 0.084        | 79.2             |  |
| Mitomycin C                | 0.082    | 0.082                      | 0.084 | 0.083        | 79.2             |  |
| Paclitaxel (Taxol)         | 0.086    | 0.081                      | 0.082 | 0.083        | 79.2             |  |
| Thiotepa                   | 0.084    | 0.083                      | 0.087 | 0.085        | 79.2             |  |
| Vincristine Sulfate        | 0.088    | 0.084                      | 0.082 | 0.085        | 79.2             |  |

Ms. Nurul Aisyah Kong Hartalega SDN. BHD

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# RESULTS:

Table 5. Permeation Test Results on: Nitrile Powder Free Examination Gloves (Blue) Code: ABLU.

| TEST CHEMOTHERAPY DRUG<br>AND CONCENTRATION          | MINIMUM<br>BREAKTHROUGH<br>DETECTION TIME<br>(Specimen 1/2/3)<br>(Minutes) | STEADY STATE<br>PERM. RATE<br>(Specimen 1/2/3)<br>(µg/cm <sup>2</sup> /minute) | OTHER<br>OBSERVATIONS                   |
|--|--|--|---|
| Carmustine (BCNU), 3.3 mg/ml<br>(3,300 ppm)          | 35.80<br>(45.31,30.46,31.63)   | 1.24<br>(1.36,1.16,1.20)   | Moderate swelling<br>and no degradation |
| Cisplatin, 1.0 mg/ml (1,000 ppm)                     | No breakthrough up<br>to 240 min.  | N/A  | Slight swelling and<br>no degradation   |
| Cyclophosphamide (Cytoxan), 20<br>mg/ml (20,000 ppm) | No breakthrough up<br>to 240 min.  | N/A  | Slight swelling and<br>no degradation   |
| Dacarbazine (DTIC), 10.0 mg/ml<br>(10,000 ppm)       | No breakthrough up<br>to 240 min.  | N/A  | Slight swelling and<br>no degradation   |
| Doxorubicin Hydrochloride, 2.0<br>mg/ml (2,000 ppm)  | No breakthrough up<br>to 240 min.  | N/A  | Slight swelling and<br>no degradation   |
| Etoposide (Toposar), 20.0 mg/ml<br>(20,000 ppm)      | No breakthrough up<br>to 240 min.  | N/A  | Slight swelling and<br>no degradation   |
| Fluorouracil, 50.0 mg/ml (50,000 ppm)                | No breakthrough up<br>to 240 min.  | N/A  | Slight swelling and<br>no degradation   |
| Methotrexate, 25 mg/ml (25,000 ppm)                  | No breakthrough up<br>to 240 min.  | N/A  | Slight swelling and<br>no degradation   |
| Mitomycin C, 0.5 mg/ml (500 ppm)                     | No breakthrough up<br>to 240 min.  | N/A  | Moderate swelling<br>and no degradation |
| Paclitaxel (Taxol), 6.0 mg/ml (6,000 ppm)            | No breakthrough up<br>to 240 min.  | N/A  | Moderate swelling<br>and no degradation |
| Thiotepa, 10.0 mg/ml (10,000 ppm)                    | 85.48<br>(105.33,75.52,75.60)  | 1.32<br>(1.33,1.32,1.32)   | Slight swelling and<br>no degradation   |
| Vincristine Sulfate, 1.0 mg/ml (1,000 ppm)           | No breakthrough up to 240 min.   | N/A  | Slight swelling and<br>no degradation   |

Tiffany L. Heller

Tiffany L. Hellef Chemical Technician, Chemical Services AKRON RUBBER DEVELOPMENT LABORATORY, INC.

Ana C. Barbur, M.S. Chemical and Pharmaceutical Services

# **Certificates Testing**

| MATERIAL SAFETY<br>DATA SHEET   |  | 3  | Hartalega  |  |                          |  |
|---|--|--|--|--|--------------------------|--|
| SECTION 1: PRODUCT  | IDENTIFIC/   | ATION  |  |  |                          |  |
| NAME<br>Hartalega Sdn. Bhd.   |  | C-G-9, Jala<br>PJU 9, Ban  | ADDRESS<br>C-G-9, Jalan Dataran SD1, Dataran SD,<br>PJU 9, Bandar Sri Damansara, |  |                          |  |
| TELEPHONE NUMBER<br>(603) 62771733  |  | 52200 Kua<br>DATE PR<br>October 15   | EPARED   |  |                          |  |
| COMMON NAME (USED ON<br>Nitrile Powder Free Examination   |  |  | ed Butadien  |  | Polymer Latex            |  |
| APPLICATION<br>Medical and Dental   |  | GLOVEON<br>NITRILE P   | PALOMA (N  | NONYM<br>NTR51)                          | TION GLOVES (WHIT        |  |
| SECTION 2: HAZARDO  | 1  | IENTS  |  |  |                          |  |
| HAZARDOUS COMPONENT   |  | %(WT)  | TLV  |  | PEL                      |  |
| N/A<br>PEL : Permissible Exposure Limit est   | N/A  | N/A  | N/A  |  | N/A                      |  |
| dibutyldithiocarbamate, Zinc Oxid   | dium Dodecylbe<br>de, Paraffin Wax   | nzenesulfonate, Sul  | phur, Titaniu  | m Dioxide, Zi                            | nc-n-                    |  |
| Butadiene-Acrylonitrile Latex, So   | dium Dodecylber<br>de, Paraffin Wax<br>MEASURE<br>ation is noticed, r  | nzenesulfonate, Sulj<br>Emulsion   |  |  |                          |  |
| Butadiene-Acrylonitrile Latex, So<br>dibutyldithiocarbamate, Zinc Oxid<br>SECTION 4: FIRST AID<br>If reaction in the form of skin irrita  | dium Dodecylber<br>de, Paraffin Wax<br>MEASURE<br>ation is noticed, r<br>reactions.  | nzenesulfonate, Sul<br>Emulsion<br>emove gloves imme   |  |  |                          |  |
| Butadiene-Acrylonitrile Latex, So<br>dibutyldithiocarbamate, Zinc Oxid<br>SECTION 4: FIRST AID<br>If reaction in the form of skin irrita<br>If there is no relief, seek medical   | dium Dodecylbe<br>de, Paraffin Wax<br>MEASURE<br>ation is noticed, r<br>reactions.   | nzenesulfonate, Sul<br>Emulsion<br>emove gloves imme   | diately and v  | vash affected                            |                          |  |
| Butadiene-Acrylonitrile Latex, So<br>dibutyldithiocarbamate, Zinc Oxid<br>SECTION 4: FIRST AID<br>If reaction in the form of skin irrita<br>If there is no relief, seek medical<br>SECTION 5: FIRE FIGH<br>FLASHPOINT   | dium Dodecylbe<br>de, Paraffin Wax<br>MEASURE<br>ation is noticed, r<br>reactions.<br>TING MEAS<br>AUTOIGNITIC<br>N/A  | nzenesulfonate, Sul<br>Emulsion<br>emove gloves imme   | diately and v  | wash affected                            | I part with saline water |  |
| Butadiene-Acrylonitrile Latex, So<br>dibutyldithiocarbamate, Zinc Oxid<br>SECTION 4: FIRST AID<br>If reaction in the form of skin irrite<br>If there is no relief, seek medical<br>SECTION 5: FIRE FIGH<br>FLASHPOINT<br>N/A<br>EXTINGUISHING MEDIA   | dium Dodecylbe<br>de, Paraffin Wax<br>MEASURE<br>ation is noticed, r<br>reactions.<br>TING MEAS<br>AUTOIGNITIC<br>N/A<br>I may be used<br>RES  | nzenesulfonate, Sul<br>Emulsion<br>emove gloves imme<br>URE<br>DN TEMPERATUR   | RE I   | wash affected<br>F <b>LAMMABL</b><br>I/A | I part with saline water |  |
| Butadiene-Acrylonitrile Latex, So<br>dibutyldithiocarbamate, Zinc Oxid<br>SECTION 4: FIRST AID<br>If reaction in the form of skin irrit<br>If there is no relief, seek medical<br>SECTION 5: FIRE FIGH<br>FLASHPOINT<br>N/A<br>EXTINGUISHING MEDIA<br>Chemical foam and dry chemical<br>FIRE-FIGHTING PROCEDUF  | dium Dodecylbei<br>de, Paraffin Wax<br>MEASURE<br>ation is noticed, r<br>reactions.<br>TING MEAS<br>AUTOIGNITIC<br>N/A<br>I may be used<br>RES<br>noticion material<br>CARDS   | nzenesulfonate, Sul<br>Emulsion<br>emove gloves imme<br>URE<br>DN TEMPERATUR   | RE I   | wash affected                            | I part with saline water |  |
| Butadiene-Acrylonitrile Latex, So<br>dibutyldithiocarbamate, Zinc Oxid<br>SECTION 4: FIRST AID<br>If reaction in the form of skin irrite<br>If there is no relief, seek medical<br>SECTION 5: FIRE FIGH<br>FLASHPOINT<br>N/A<br>EXTINGUISHING MEDIA<br>Chemical foam and dry chemical<br>FIRE-FIGHTING PROCEDUP<br>Use standard procedures for con<br>FIRE AND EXPLOSION HAZ  | dium Dodecylbei<br>de, Paraffin Wax<br>MEASURE<br>ation is noticed, r<br>reactions.<br>TING MEAS<br>AUTOIGNITIC<br>N/A<br>I may be used<br>RES<br>nobustion material<br>CARDS<br>associated with f   | Inzenesulfonate, Sul<br>Emulsion<br>emove gloves imme<br>URE<br>DN TEMPERATUR  | RE I   | wash affected                            | I part with saline water |  |
| Butadiene-Acrylonitrile Latex, So<br>dibutyldithiocarbamate, Zinc Oxid<br>SECTION 4: FIRST AID<br>If reaction in the form of skin irrite<br>If there is no relief, seek medical<br>SECTION 5: FIRE FIGH<br>FLASHPOINT<br>N/A<br>EXTINGUISHING MEDIA<br>Chemical foam and dry chemical<br>FIRE-FIGHTING PROCEDUF<br>Use standard procedures for con<br>FIRE AND EXPLOSION HAZ<br>No fire or explosion hazards are  | dium Dodecylbei<br>de, Paraffin Wax<br>MEASURE<br>ation is noticed, r<br>reactions.<br>TING MEAS<br>AUTOIGNITIC<br>N/A<br>I may be used<br>RES<br>nobustion material<br>CARDS<br>associated with I<br>FAL RELEAS   | Interest for the second | RE I<br>roved self-co<br>y will melt at<br>S<br>als does not                     | wash affected                            | I part with saline water |  |
| Butadiene-Acrylonitrile Latex, So<br>dibutyldithiocarbamate, Zinc Oxid<br>SECTION 4: FIRST AID<br>If reaction in the form of skin irrite<br>If there is no relief, seek medical<br>SECTION 5: FIRE FIGH<br>FLASHPOINT<br>N/A<br>EXTINGUISHING MEDIA<br>Chemical foarn and dry chemical<br>FIRE-FIGHTING PROCEDUF<br>Use standard procedures for con<br>FIRE AND EXPLOSION HAZ<br>No fire or explosion hazards are<br>SECTION 6: ACCIDENT<br>BIOCOMPATABILITY<br>The chemical formulation of the g   | dium Dodecylbei<br>de, Paraffin Wax<br>MEASURE<br>ation is noticed, r<br>reactions.<br>TING MEAS<br>AUTOIGNITIC<br>N/A<br>I may be used<br>RES<br>nobustion material<br>CARDS<br>associated with I<br>FAL RELEAS<br>gloves and surfac<br>or to any person<br>NERALLY AGO                     | Interestion ate, Sul<br>Emulsion<br>Emulsion<br>URE<br>DN TEMPERATUR<br>I fires, including appro-<br>these products. They<br>SE MEASURES<br>the lubrication materia<br>with whom the glove<br>GRAVATED BY E  | roved self-co<br>y will melt at<br>als does not<br>ss come into<br>XPOSURE       | wash affected                            | I part with saline water |  |
| Butadiene-Acrylonitrile Latex, So<br>dibutyldithiocarbamate, Zinc Oxid<br>SECTION 4: FIRST AID<br>If reaction in the form of skin irrite<br>If there is no relief, seek medical<br>SECTION 5: FIRE FIGH<br>FLASHPOINT<br>N/A<br>EXTINGUISHING MEDIA<br>Chemical foarn and dry chemical<br>FIRE-FIGHTING PROCEDUF<br>Use standard procedures for con<br>FIRE AND EXPLOSION HAZ<br>No fire or explosion hazards are<br>SECTION 6: ACCIDENT<br>BIOCOMPATABILITY<br>The chemical formulation of the open of the open of the sector<br>MEDICAL CONDITIONS GE | dium Dodecylbei<br>de, Paraffin Wax<br>MEASURE<br>ation is noticed, r<br>reactions.<br>TING MEAS<br>AUTOIGNITIC<br>N/A<br>I may be used<br>RES<br>nobustion material<br>CARDS<br>associated with I<br>FAL RELEAS<br>gloves and surfactor to any person<br>NERALLY AGO<br>to texpected to car | Inzenesulfonate, Sul<br>Emulsion<br>emove gloves imme<br>URE<br>DN TEMPERATUR<br>I fires, including appr<br>these products. They<br>SE MEASURES<br>ce lubrication materi-<br>with whom the glove<br>GRAVATED BY E<br>ause any adverse he   | roved self-co<br>y will melt at<br>als does not<br>ss come into<br>XPOSURE       | wash affected                            | I part with saline water |  |

| SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION  |   |                                    |  |                               |             |  |  |  |  |
|--|---|------------------------------------|--|-------------------------------|-------------|--|--|--|--|
| EYE PROTECTION<br>Not necessary und  |   | ended use.                         | SKIN PROTECTION<br>Not necessary under                         | ON<br>er conditions of intend | ed use.     |  |  |  |  |
| RESPIRATORY<br>Not necessary und   |   | ended use.                         | VENTILATION<br>Not necessary under conditions of intended use. |                               |             |  |  |  |  |
| STEPS TO BE TAKEN IN CASE MATERIAL IS LEAKED OR SPILLED<br>These products are solid articles and are not subject to leaks or spills. |   |                                    |  |                               |             |  |  |  |  |
| SECTION 9: F   | SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES |                                    |  |                               |             |  |  |  |  |
| APPEARANCE/ODOR<br>Ambidextrous, Beaded Cuff, Micro-textured, Chlorinated, Powder Free, White.                                       |   |                                    |  |                               |             |  |  |  |  |
| DIMENSION  | EXTRA-SMALL                                 | SMALL                              | MEDIUM   | LARGE                         | EXTRA-LARGE |  |  |  |  |
| Length (mm)  |   | Min                                | imum 230 (same fo  | rall)                         |             |  |  |  |  |
| Width (mm)   | 76±4  | 86±4                               | 98±4   | 107±4                         | 115±4       |  |  |  |  |
| THICKNESS (mm)   | - SINGLE WALL                               | MEASUREMENT (s                     | ame for all)   |                               |             |  |  |  |  |
| Finger (mm)<br>Palm (mm)   |   | _                                  | 0.09 ± 0.02<br>0.07 ± 0.02                                     |                               |             |  |  |  |  |
| TENSILE PROPER   | RTIES                                       | UNA                                | GED  | AG                            | ED          |  |  |  |  |
| Tensile Strength (N  | lpa)  | Min. 14                            | I.0 MPa  | Min. 14.                      | 0 MPa       |  |  |  |  |
| Ultimate Elongation  | n (%)                                       | Min.                               | 500%   | Min. 4                        | 100%        |  |  |  |  |
| SECTION 10:  | STABILITY A                                 | ND REACTIVIT                       | Ϋ́   |                               |             |  |  |  |  |
| BOILING POINT  |   | VAPOR PRESSU                       | RE (mm Hg)   | VAPOR DENSITY (air=1)<br>N/A  |             |  |  |  |  |
| SPECIFIC GRAV  | ITY (water=1)                               | SOLUBILITY IN V<br>Insoluble       | VATER  | % VOLATILE BY<br>N/A          | VOLUME      |  |  |  |  |
| EVAPORATION<br>N/A   | RATE  |                                    | VISCOSITY<br>N/A   |                               |             |  |  |  |  |
| SECTION 11:  | TOXICOLOG                                   | ICAL INFORMA                       | TION   |                               |             |  |  |  |  |
| STABILITY<br>Stable  |   |                                    | CONDITIONS T<br>Does not apply                                 | o avoid                       |             |  |  |  |  |
| INCOMPATABIL<br>High polar solven  | •   | S TO AVOID)<br>/I ketone, acetone. |  |                               |             |  |  |  |  |
| HAZARDOUS DE   | ECOMPOSITION<br>ducts may produce           | PRODUCTS                           | on Dioxide, Carbon   | Monoxide, Oxides of           | Nitrogen,   |  |  |  |  |
| HAZARDOUS PO<br>Will not occur   |   | N                                  |  |                               |             |  |  |  |  |
| SECTION 12:  | ECOLOGICA                                   | L INFORMATIC                       | N  |                               |             |  |  |  |  |
| NA   |   |                                    |  |                               |             |  |  |  |  |
| SECTION 13:  | SECTION 13: DISPOSAL CONSIDERATION          |                                    |  |                               |             |  |  |  |  |
| WASTE DISPOSAL METHOD<br>Consult current local, state and federal regulations for proper disposal methods.                           |   |                                    |  |                               |             |  |  |  |  |
| SECTION 14: TRANSPORT INFORMATION  |   |                                    |  |                               |             |  |  |  |  |
| NA   |   |                                    |  |                               |             |  |  |  |  |
| SECTION 15:  | REGULATOR                                   |                                    | ON   |                               |             |  |  |  |  |
| NA   |   |                                    |  |                               |             |  |  |  |  |
| SECTION 16:  | OTHER INFO                                  | RMATION                            |  |                               |             |  |  |  |  |
| RECOMMENDED  | USE AND RES                                 |                                    | æ  |                               |             |  |  |  |  |
| ······································   |   |                                    |  |                               |             |  |  |  |  |