

# **SUMIRUBBER MALAYSIA TECHNICAL DATA SHEET**

**Product Code: CN-F-07**

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<b>Revision No.</b>	<b>Issue Date</b>	<b>Reason for Issue</b>
<b>0</b>	<b>September 17, 2019</b>	<b>First Issue</b>
<b>1</b>	<b>October 14, 2019</b>	<b>Update New NB Number</b>
<b>2</b>	<b>November 27, 2019</b>	<b>Update Packing Style</b>
<b>3</b>	<b>July 02, 2020</b>	<b>Update EN374 Claim</b>
<b>4</b>	<b>July 08, 2020</b>	<b>Revise Packing Style</b>
<b>5</b>	<b>July 17, 2020</b>	<b>Update EU Certificate</b>

# TECHNICAL DATA SHEET

## SUMIRUBBER MALAYSIA

<b>Documentation No</b> : TDS 372/19	<b>Product Code</b> : CN-F-07
<b>Revision No</b> : 5	<b>Brand</b> : DUNLOP
<b>Date</b> : July 17, 2020	

Manufactured By:  
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### 1. Product Features

- Chemical processing and handling of chemical mixture/compounding
- Handling of hazardous chemicals, Acetone, Tetrahydrofuran, Ethyl Acetate, Butyl Acetate
- Installation/Handling of spraying gun and robotic arms
- Petrochemical processing
- Laboratories sampling and testing
- Assembly, mounting device, dismantling
- Maintenance and cleaning

### 2. Application/Usage

- Chemical processing
- Spray painting
- Cleaning and maintenance in chemical plants
- Handling acids,alkalies, salts and ketones.

### 3. Product Description

#### Unsupported Dual Polymers Flocklined Gloves

Coating material : Chloroprene + Nitrile  
Liner material : Flocklined  
Palm Pattern : Pebble  
Colour : Tangerine Tango  
Length : 345 ± 10 mm  
Wrist Thickness : 0.40 ± 0.05 mm  
Cuff Style : Straight

Glove Size	7	8	9	10	11
Palm Width (± 5 mm)	98 mm	102 mm	114 mm	121 mm	133 mm

### 4. Physical Properties ( Accordance to ISO 37:2005 and ISO 188:2007)

Before	Tensile at break (MPa)	: min 8.0
Aging	Elongation at break (%)	: min 420
After	Tensile at break (MPa)	: min 6.0
Aging	Elongation at break (%)	: min 320

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### 5. Performance Requirements (for individual use) AQL

Item	Related Defects	Ins. Level	AQL
Visible defects	Critical : Hole	G-1	0.65
	Major : Break Up, Mix Size, Scratch & Miss Pairing	G-1	1.0
	Minor : Foreign matter, Coagulum, Dirt, Sticky, Illegible Stamping & Stain	G-1	2.5
Dimensions	Width, Length, Thickness	S-2	4.0

### 6. Mechanical protection (Accordance to EN388:2016)

Abrasion resistance (cycle)	: 3 of 4
Blade Cut resistance - coupe test (Index)	: 1 of 5
Tear resistance (N)	: 0 of 4
Puncture resistance (N)	: 1 of 4
Cut resistance - ISO 13997:1999 (N)	: X

### 7. Chemical protection (Accordance to EN374-1:2016)

Methanol (A)	: 3 of 6	38.6%	(Slight swelling)
Acetonitrile (C)	: 2 of 6	51.5%	(Swollen & discoloured)
n-Heptane (J)	: 4 of 6	40.0%	(Slight swelling)
Sodium Hydroxide 40% (K)	: 6 of 6	13.8%	(No change)
Sulphuric Acid 96% (L)	: 3 of 6	29.5%	(Severe swelling & colour change)
Nitric Acid 65% (M)	: 5 of 6	22.6%	(Moderate swelling & colour change)
Acetic Acid 99% (N)	: 5 of 6	36.7%	(Slight swelling)
Ammonium Hydroxide 25% (O)	: 4 of 6	18.6%	(Slight swelling)
Hydrogen Peroxide 30% (P)	: 6 of 6	7.3%	(Swollen)
Hydrofluoric acid 40% (S)	: 6 of 6	-	
Formaldehyde 37% (T)	: 6 of 6	23.1%	(Slight swelling)

\*This information does not reflect the actual duration of protection in the workplace and the differentiation between mixtures and pure chemicals.

### 8. EU Type Examination Certification

To refer certificate no: 2777/14798-01/E00-00

### 9. User Information

To refer documentation no: Refer attachment

### 10. Stamping (Stamping at the back of each gloves)



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### 11. Packaging

- a) Packing style
- Full Length, 3 Pairs packed in a Polybag
  - 12 pairs + User Info Sheet pack in an inner polybags.
  - 72 pairs (6 bundles) in a Master carton.
- b) Polybag layout
- N.A
- c) Carton Marking
- DUNLOP
- d) Carton Dimension
- Length: 400 mm x Width: 280 mm x Height: 270 mm
- e) Container Capacity
- 1 x 20ft : Approximately 896 cartons ( 64,512 pairs)
  - 1 x 40ft : Approximately 1856 cartons ( 133,632 pairs)

**Controlled by:**



Quality Assurance Dept  
Date: July 17, 2020

**Approved by :**



Quality Assurance Manager  
Date: July 17, 2020

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Issued to:

Sumirubber Malaysia Sdn Bhd  
 Lot 44, 45 & 86  
 Bakar Arang Industrial Estate  
 08000 Sungai Petani Kedah  
 Malaysia

Notified Body: 2777

SATRA customer number: P1218

### EU Type-Examination Certificate

**Certificate number: 2777/14798-01/E00-00**

This EU Type-Examination Certificate covers the following product group(s) supported by testing to the relevant standards/technical specifications and examination of the technical file documentation:  
 Following the EU Type-Examination this product group has been shown to satisfy the applicable essential health and safety requirements of Annex II of the PPE Regulation (EU) 2016/425 as a Category III product.

**Product reference:** CN-F-07  
**Description:** Unsupported Dual Polymers Flocklined Gloves

**Sizes:**  
7 – 11

<b>Classification:</b>		<b>Level</b>	<b>EN ISO 374-4: 2019 Degradation %</b>
<b>EN ISO 374-1: 2016/ Type A</b>			
Methanol (A)		3	38.6
Acetonitrile (C)		2	51.5
n-Heptane (J)		4	40.0
40% Sodium Hydroxide (K)		6	13.8
96% Sulphuric Acid (L)		3	29.5
65% Nitric Acid (M)		5	22.6
99% Acetic Acid (N)		5	36.7
25% Ammonium Hydroxide (O)		4	18.6
30% Hydrogen Peroxide (P)		6	7.3
40% Hydrofluoric Acid (S)		6	-
37% Formaldehyde (T)		6	23.1
<b>EN ISO 374-5: 2016</b>			
Protection against bacteria and fungi		Pass	
Protection against viruses		Pass	
<b>EN 388: 2016</b>		<b>Level</b>	
Abrasion Resistance		3	
Cut Resistance		1	
Tear Resistance		0	
Puncture Resistance		1	
TDM Cut		X	

Standards/Technical specifications applied:  
 EN 420: 2003+A1: 2009; EN 388:2016; EN ISO 374-1:2016+A1:2018; EN ISO 374-5:2016

Technical reports/Approval documents:  
 SATRA: CHM 0297482/2018/LC/B; CHM0295200/2008/LH/A; CHM0297888/2020/LC/A; CHM0297888/2020/LC/B;  
 SGS: CH:TX:1142001359; CH:TX:1042042020; CH:TX:1142011234;  
 CTC: H190902980\_1

Signed on behalf of SATRA:

Gabriela Zajac

Geoff Graham

**Date first issued:** 16/07/2020  
**Date of issue:** 16/07/2020

**Expiry date:** 16/07/2025

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EN  
CE 0598

### GLOVES STYLES & AVAILABLE SIZES

Model	Size	EN388:2016	EN ISO 374-1:2016						EN 374-4:2013						EN ISO 374-5:2016	EN407:2004	Product Description						
			Performance Level/Type						Degradation By Chemicals									Observation					
			A	C	J	K	L	M	A	C	J	K	L	M				A	C	J	K	L	M
CN-F-07	7,8,9,10,11	3101X	3	2	4	6	3	5	367	366	186	51.5	73	400	2	5	2	1	5	3	YES	-	Unsupported Dual Polymers Cotton Flocked Gloves
			5	4	6	6	6		412	366	237	51.5	73	400	2	2	3	-	2				
BCK7 TG	7,8,9,10,11	3121X	3	2	6	6	4	6	412	366	237	51.5	73	400	2	5	2	1	5	2	YES	X1XXXX	Supported Dual Polymers Gloves with Seamless Cotton Liner
			5	4	6	6	6		412	366	237	51.5	73	400	2	2	1	-	2				

### Conformity

These products are designed to protect user's hands against certain mechanical, chemical & thermal risk. Testing and marking on the gloves are in accordance with the Regulation (EU) 2016/425 as Cat III product as well as applicable CE standards (EN420:2003+A1:2009, EN388:2016 and EN ISO 374-1:2016, EN ISO 374-5:2016 & EN407:2004). Please ensure the gloves are used strictly for the intended applications.

### EN388:2016 - Mechanical Risks



where  
a = resistance to abrasion (Min. 0 ; Max. 4)  
b = resistance to blade cut (Min. 0 ; Max. 5)  
c = resistance to tear (Min. 0 ; Max. 4)  
d = resistance to puncture (Min. 0 ; Max. 4)  
e = Cut ISO 13997:1999 (Min. A ; Max. F)

### EN407:2004 - Heat Protection



where  
a = burning behaviour  
b = contact heat  
c = convective heat  
d = radiant heat  
e = small drops molten metals  
f = large quantity molten metal

### EN ISO 374-1:2016 - Protective Gloves Against Dangerous Chemicals

### EN 16523-1:2015 - Permeation against dangerous chemical

Table 1 - List of test chemicals



where  
ACJKLMNOPST

A : Methanol  
B : Acetone  
C : Acetonitrile  
D : Dichloromethane  
E : Carbon disulphide  
F : Toluene  
G : Diethylamine  
H : Tetrahydrofuran  
I : Ethyl acetate  
J : n-Heptane  
K : Sodium hydroxide 40%  
L : Sulphuric acid 96%  
M : Nitric acid 65%  
N : Acetic acid 99%  
O : Ammonium hydroxide 25%  
P : Hydrogen peroxide 30%  
S : Hydrofluoric acid 40%  
T : Formaldehyde 37%

Performance Level	Breakthrough Time (minutes)
0	≤ 10
1	> 10
2	> 30
3	> 60
4	> 120
5	> 240
6	> 480

### Note:

Type A: The permeation performance shall be at least level 2 against a minimum of six test chemicals in Table 1.  
Type B: The permeation performance shall be at least level 2 against a minimum of three test chemicals in Table 1.  
Type C: The permeation performance shall be at least level 1 against a minimum of one test chemical in Table 1.

### EN374-4: 2013 - Resistance to degradation by chemicals

Note for Observation (EN 374-4:2013)

- 1 : No Change
- 2 : Slight Swelling
- 3 : Moderate Swelling
- 4 : Severe Swelling
- 5 : Severe Swelling & Colour Change



Please read instruction for use.

### EN ISO 374-5:2016 - Protection against Micro-Organisms



Gloves are sampled and tested for leakage (penetration test) in accordance to annex A of EN374-2:2014 and the results at performance level 2, VIRU inspection level G1 and AQL = 1.5

### Remarks

0 = the test result shows that the minimum level is not achieved  
X = the glove has not been submitted to the test

### USAGE

Choose the appropriate glove size to avoid hand fatigue.

This information does not reflect the actual duration of protection in the workplace and the differentiation between mixtures and pure chemicals. The chemical resistance has been assessed under laboratory conditions from samples taken from the palm only (except in cases where the glove is equal to or over 400mm - where the cuff is tested also) and relates only to the chemical tested. It can be different if the chemical is used in a mixture. It is recommended to check that the gloves are suitable for the intended use because the conditions at the workplace may differ from the type test depending on temperature, abrasion and degradation. When use, protective gloves may provide less resistance to the dangerous chemical due to changes in physical properties. Movement, snagging, rubbing, degradation caused by the chemical contact etc may reduce the actual use time significantly. For corrosive chemicals, degradation can be the most important factor to consider in selection of chemical resistant gloves. Before usage, inspect gloves for any defect or imperfections. Discard immediately gloves which have become worn out or damaged when used. Never wear gloves which are wet or dirty inside to avoid dermatitis. Do not wear gloves with high tear resistant next to moving machine parts due to risk of entanglement. Quality of used gloves may deteriorate after long storage. The penetration resistance has been assessed under laboratory conditions and relates only to the tested specimen. The levels of performance mentioned are only valid for the palm of the glove. These gloves are tested and pass against bacteria, fungi and virus protection, EN ISO 374-5:2016.

### CARE & STORAGE

Store in a cool dry place, away from direct sunlight, sources of heat and UV radiation. Retain in original pack for transport. The shelf life cannot be determined and is dependent on the intended use and storage conditions.

### PPE SUBJECT TO AGEING

Peremption period : 5 years when stored in appropriate conditions (humidity, temperature, clean, ventilated, light). Before use, the gloves shall be visually checked. In case of deterioration the gloves must be scrapped (abrasion, cut, tear....)

### POTENTIALITY ALLERGENIC MATERIALS

Some gloves may contain materials considered as the possible cause of allergies in susceptible persons, and which may therefore lead to skin irritation and/or allergic reactions. In the event of an allergic reaction, consult a doctor immediately. For further information can be obtained from the manufacturer.

### CLEANING INSTRUCTIONS

The washing and re-use of these gloves when used for chemical protection is not recommended. For further information please contact the manufacturer.

### DISPOSAL

Uncontaminated gloves may be disposed off with household waste. Used gloves which have been contaminated with hazardous chemicals must be disposed off with care in accordance with local authorities.

### Further information can be obtained from Sumirubber Malaysia Sdn. Bhd.

Sumirubber Malaysia Sdn.Bhd. (172875-K)

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