

# Certification Report

## Product Certification Scheme

This Certification Report shall not be amended, changed, varied or modified in any manner whatsoever by the licensee or otherwise. If the Certification Report is to be furnished to any third party or to the public, each such Certification Report shall be furnished in full and its entirety. This Certification Report shall be read in conjunction with the Product Certification Agreement.

File No : P5-017127  
Report No : RPT014987  
Edition : 2 Revision : 0  
Issued By : AHMAD FARIHAN BIN MOHD ALWI  
Date Issued : 21/04/2022  
Applicant : 3M MALAYSIA SDN. BHD.  
LEVEL 8, BLOCK F  
OASIS SQUARE, NO. 2,  
JALAN PJU 1A/7A, ARA DAMANSARA  
47301, PETALING JAYA  
SELANGOR, MALAYSIA  
Factory : ASWAN INTERNATIONAL CORP.  
5F-1, NO. 102, ROOSEVELT ROAD  
SECTION 2, TAIPEI  
TAIWAN, R.O.C  
47301, TAINAN CITY, TAIWAN  
Product : PERSONAL EYE AND FACE PROTECTION DEVICES  
Certification Basis : Standard (s) : • ANSI/ISEA Z 87.1 : 2010  
AMERICAN NATIONAL STANDARD FOR OCCUPATIONAL AND EDUCATIONAL  
PERSONAL EYE AND FACE PROTECTION DEVICES

Product Certification Requirements in accordance to the Product Certification Agreement  
Work Instruction : PCS/WI/MA/27

Verified By :

WAN AHMAD JAILANI WAN MAHMUD

14/04/2022

Approved By :

Ts. MD ADHA RAHMAT

14/04/2022

**Part A: Product Evaluation**

Brand	Model	Type	Rating	Size	Label
3M	12163-00000-20	EYEWEAR	IMPACT MARK = IMPACT RATED PLANO; LENS TYPE = CLEAR COATED	-	MS
3M	SF3701ASGAF- BLU, SF3702ASGAF- BLU, SF3707ASGAF- BLU	EYEWEAR	IMPACT MARK = IMPACT RATED PLANO; LENS TYPE = CLEAR WITH SCOTCHGARD ANTI-FOG		MS
3M	SF3750ASGAF- BLU	EYEWEAR	IMPACT MARK = IMPACT RATED PLANO; LENS TYPE = GREY		MS

Manufacturing Process : 1. Len injection, Cleaning & Hard coating Drying  
 2. Frame injection  
 3. Assembly( lens and frame

**Part B: Type Test Report**

Test Report No	Date	Laboratory	Type	Result	Summary
HEF-Lab-QATR-Results-396339	15/01/2019	Laboratories accredited by Accreditation Bodies that have signed the APLAC/ILAC MRA	Type Test Report	Pass	<p>Samples for type test model SF3701ASGAF-BLU been tested according to ANSI/ISEA Z87.1 (representative for models SF3702ASGAF-BLU, SF3707ASGAF-BLU, SF3750AS-BLU &amp; 12163-00000-20) for clauses :</p> <p>5.1.1 Optical quality;          6.1.3 ANSI Lateral coverage;          5.1.2 Luminous Transmission and haze;          5.1.4 Prism and Prism Imbalance;          5.1.4 Refractive power, astigmatism and resolving power;          SGAF Coating thickness;          7.2 UV Transmittance Scan;          7.1.4.2 High Mass Impact;          7.1.4.4 Penetration Test;          7.1.4.3 High Velocity Impact;          5.2.2 Ignition resistance;          5.2.3 Corrosion resistance;          6.2 Anti-fog Properties.</p> <p>Result = All Passed. Test by 3M Center (3M Personal Safety Division Laboratory. Minnesota, USA (Accreditation Number 3356.01).</p>

## **Part C: Product Marking**

All Certified products shall be clearly, legibly and indelibly marked as followed:

- On the Product : i) Manufacturer's identification mark, i.e. 3M  
(ii) The Standard, i.e. Z87  
(iii) Coverage (small head sizes) e.g. H  
(iv) Impact Mark, i.e. + (Impact rated plano)  
(v) Lense type, e.g. U6  
(vi) SIRIM Marking, Please refer to PART I for details
- Method of Marking : Inject mould on temple
- On the Packaging : (i) Manufacturer's identification mark, i.e. 3M  
(ii) Manufacturer's model designation, e.g. 1621AF  
(iii) The number and year of this standard, i.e. ANSI/ISEA Z 87.1 : 2010  
(iv) SIRIM Certification mark, Please refer to PART I for details
- Method of Marking : Printing on the packaging

Label Type	Label Location
MS	On the packaging

## **Part D: Surveillance Programme**

1. Surveillance inspection shall be conducted 2 time(s) yearly.
2. Surveillance test

During the surveillance inspection, routine testing shall be conducted and witnessed by the certification executive. When it is not possible to witness all clauses (due to longtime testing), the certification executive may witness part of the routine test.

The tests involved are (as indicated in the QC Check Points).

Witness testing at factory as per in ANSI/ISEA Z 87.1 :-

- 5.1.1 Optical quality
- 5.1.2 Luminous Transmission and haze
- 5.2 Physical Requirements
- 7.1.2 High Mass Impact

For these tests, the sample shall be selected by the certification executive.

3. Re-evaluation test

A type test shall be conducted every 5 years on the model appeared on the licence. A full type test is also required when there is significant change in the product design, raw material used and/or production facilities.

4. Full type test shall be conducted at any of the following:
  - a. The licensee's facility (when it has been certified acceptable to SIRIM QAS International Sdn Bhd) witnessed by the project officer/competent personnel from SIRIM QAS International Sdn Bhd.
  - b. Third party laboratories acceptable to SIRIM QAS International Sdn Bhd.
  - c. SIRIM QAS International Sdn Bhd testing laboratories.

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**Part E: Component Materials & Specifications**

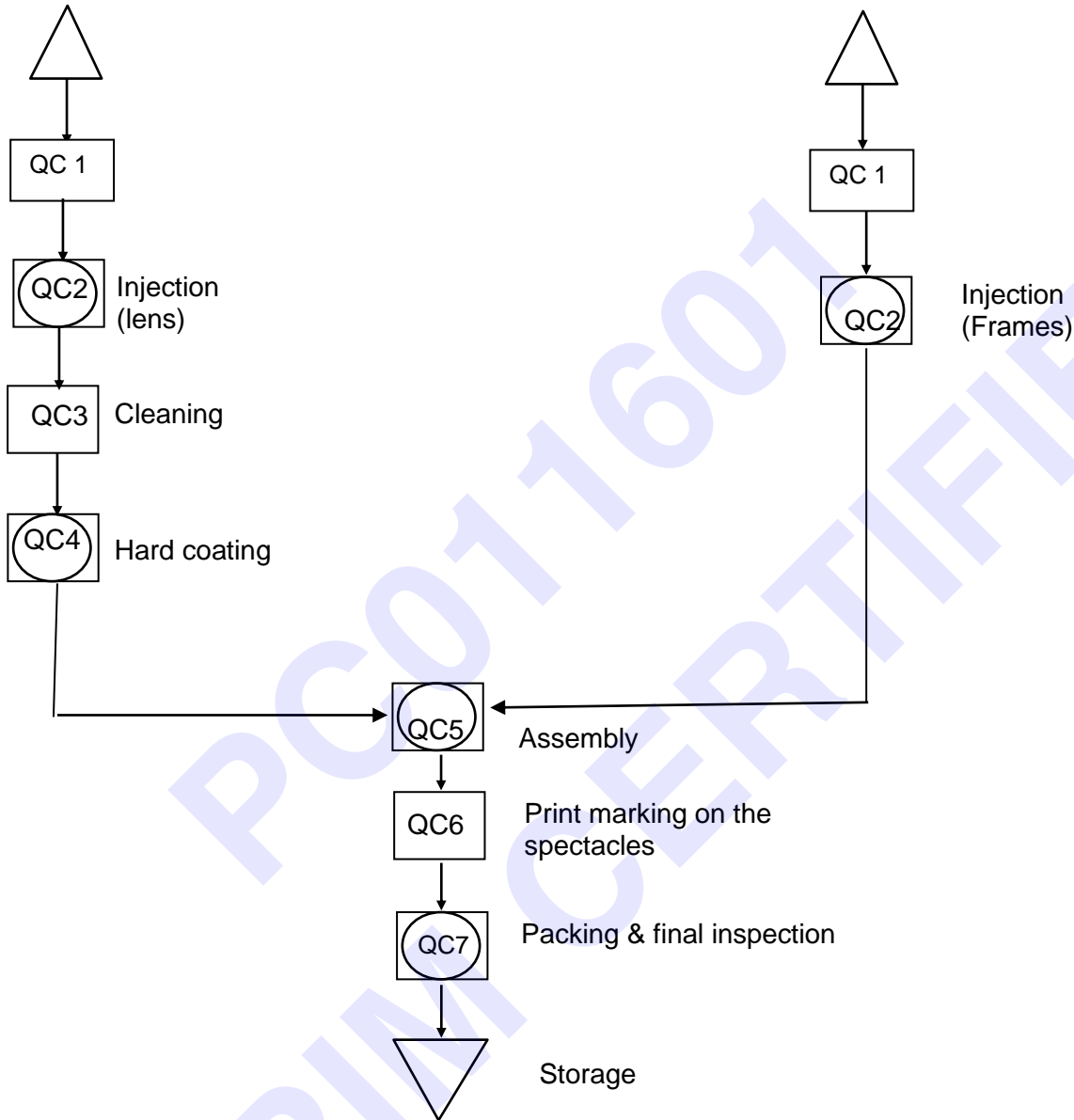
<b>ITEM / COMPONENT</b>	<b>TYPE / GRADE</b>	<b>SUPPLIER</b>
FRAME	Nylon Super tough nylon 66	HONG HUA PLASTICS
LENS	Polycarbonate resin (PC) PC 1302	LG CHEM
ANTI-FOG COATING	AF322	LOCAL SUPPLIER

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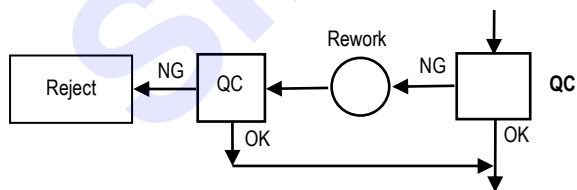
**PART F: PROCESS FLOW CHART**

Incoming Components  
(PC Resin)

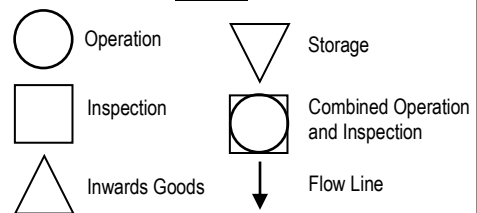
Incoming Components  
(Nylon)



Note: For all In-Process QC, the rework flow (unless otherwise stated) is as follow; e.g.



**LEGEND**



**PART G: QC CHECKPOINT**

QC NO.	ITEM INSPECTED	TEST/INSPECTION	FREQUENCY
QC1	Polycarbonate Resin  Nylon  Coating	1. Appearance check by visual 2. Verify COA from supplier  1. Appearance check by visual 2. Verify COA from supplier  1. Appearance check by visual	Every incoming
QC2	Injection	1. Workmanship 2. Appearance defect	100%
QC3	Cleaning	1. Appearance	100%
QC4	Hard coating	1. Appearance	100%
QC5	Assemble spectacle	1. Workmanship 2. Appearance defect	100%
QC6	Printing marking	1. Appearance 2. Details as per standard / customer requirement	Every 2 hrs
QC7	Spectacle	1) Quality of material and surface* 2) Drop test* 3) High velocity Test* 4) Luminous Transmittance* 5) Optical Parameter*	100%  Every lot
(*) Routine Test to be conducted by licensee and to be witnessed by SIRIM QAS Intl. project officer during surveillance inspection.			



**Part H: TEST EQUIPMENTS**

The applicant undertakes to maintain (calibrate, verify or both) the following test equipment in the factory.

No.	Equipment	Range and Calibrated parameter	Frequency
1.	Vernier caliper	0 - 150, mm	Yearly
2.	Weight balancer	0 - 3, kg	Yearly
3.	Increased robustness test (drop ball test) machine	0 - 1500, mm 0 - 500, g	Yearly
4.	Optical Parameter Machine	0.26 – 0.49, prism	Yearly
5.	High Velocity Test Machine	10 – 700, ft/sec	Yearly
6.	Luminous Transmittance Machine	280nm – 780, nm	Yearly

**Part I : EXAMPLE OF MARKING**

1. Examples of SIRIM Certification Mark;



**SIRIM**

Certified to ANSI/ISEA Z 87.1 : 2010  
 Certification No.: PC011601



**SIRIM**

ANSI/ISEA Z 87.1 : 2010  
 PC011601

2. Logo associated with trademark;



**ANNEX (PRODUCT PHOTO)**

**MODEL 12163-00000-20**



**MODEL SF3701ASGAF-BLU**



**MODEL SF3703ASGAF-BLU**



**MODEL SF3707ASGAF-BLU**



**MODEL SF37502AS-BLU**



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