







2018 2021

2013 2016 2019 Celebrating Malaysia

 MY CO2 (PG) SDN BHD
 SAMM No. 384

 20170102407 (1252424+9)
 MY CO2 (KL) SDN BHD
 SAMM No. 564

 20150102402 (1153142-44)
 MY CO2 (JB) SDN BHD
 SAMM No. 752

 20150102971 (135342-4)
 SAMM No. 752
 SIS0102979 (135342-4)

MY CO2 CERTIFICATION SDN BHD 201601026813 (1197752-20) MY CO2 CERTIFICATION PTE LTD 20190009W MY CO2 SDN BHD 16, Lengkok Kikik 1, Taman Inderawasih, 13600 Perai, Penang, Malaysia.
40, Jalan Sepadu B25/B, 40400 Shah Alam, Selangor, Malaysia.
15, Jalan Molek 1/8, Taman Molek, 81100 Johor Bahru, Johor, Malaysia.
enquiry@myco2.com.my www.myco2.com.my

laysia. T: 04-380 8282 F: 04-380 8280 T: 03-5122 3366 F: 03-5122 3386 ysia. T: 07-355 8811 F: 07-355 9808

# SUMMARY TEST REPORT

# FOR

## **TEVO CREATIONS SDN. BHD.**

### NO 2, LORONG BERINGIN 1, TAMAN INDUSTRI BERINGIN, 14100 SIMPANG AMPAT PULAU PINANG, MALAYSIA

Type of Product Testing	BERRY C
Date of testing	29 November 2021-30 May 2022
Stability report issue on	09/09/22



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 201501029802 (11531624-M)
 SAMM No. 752
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MY CO2 CERTIFICATION SDN BHD 2016/02013 (1197752-30) MY CO2 CERTIFICATION PTE LTD 2019005091 MY CO2 SDN BHD 16, Lengkok Kikik 1, Taman Inderawasih, 13600 Perai, Penang, Malaysia.
40, Jalan Sepadu B25/B, 40400 Shah Alam, Selangor, Malaysia.
15, Jalan Molek 1/8, Taman Molek, 81100 Johor Bahru, Johor, Malaysia.
enquiry@myco2.com.my www.myco2.com.my

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#### 1.0 INTRODUCTION

MY CO2 (PG) Sdn. Bhd. was engaged by Tevo Creations Sdn.Bhd to conduct a lab testing for product **Berry C.** The objective of this testing was to determine the stability profile for storage under accelerated condition.

This report presents a description on the methodology and quality control measures/standard adopted during the laboratory analysis. Finally the results are presented and discussed.

#### 2.0 TEST DESIGN

The product was cloudy colourless solution which packed in a plastic bottle. Then, the product was stored in stability chamber.

#### **Test Material:**

Product	Packing Type	Storage Condition/ Period
Berry C	Plastic bottle	$40 \pm 2^{\circ}$ C, $75 \pm 5\%$ RH*
		Accelerated 1 month = Real Time 6 month

\* Relative Humidity

Note: Test duration for stability test was based on the Guidelines for Stability Studies/ Testing of Drug Products, National Pharmaceutical Control Bureau, Ministry of Health Malaysia. 1 month accelerated= 6 months of real time.

#### **Testing Plan:**

a) Storage Conditions and Testing Interval for product Berry C:

Lab Reference No.	Date Received	Date Completion	Storage Condition	
			Accelerated Stability	
			$40 \pm 2^{\circ}$ C, $75 \pm 5\%$ RH*	
PL2111-C82843	29/11/21	07/12/21	0 Month	
PL2202-C93593	28/02/22	07/03/22	3 <sup>rd</sup> Month	
PL2205-D05071	30/05/22	04/06/22	6 <sup>th</sup> Month	

\* Relative Humidity

Note: Test duration for stability test was based on the Guidelines for Stability Studies/ Testing of Drug Products, National Pharmaceutical Control Bureau, Ministry of Health Malaysia. 1 month accelerated= 6 months of real time.

b) Testing Parameter

#### **Physical Test:**

- Appearance
- Odor

#### **Chemical Tests:**

- Alcohol content
- pH



#### 3.0 QUALITY CONTROL

In general, the quality control (QC) procedures are:

- All phase of works including equipment, sampling, preservation, physical analysis, chemical analysis, microbiological analysis & reporting were generally performed in accordance to recognized Methodologies and Standards.
- QC procedures including routine analysis of duplicates and method blanks, and inline equipment calibration etc. were performed to ensure repeatability and quality of the results.





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16, Lengkok Kikik 1, Taman Inderawasih, 13600 Perai, Penang, Malaysia. 40, Jalan Sepadu B25/B, 40400 Shah Alam, Selangor, Malaysia. 15, Jalan Molek 1/8, Taman Molek, 81100 Johor Bahru, Johor, Malaysia. enquiry@myco2.com.my www.myco2.com.my

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#### 4.0 **METHODOLOGY OF ANALYSIS**

#### 4.1 Physical Testing

#### 4.1.1 Appearance (Organoleptic)

By physical description.

#### 4.1.2 Odor (Organoleptic)

By sensory testing

#### 4.2 Chemical Testing

#### 4.2.1 pH (APHA 4500-H+B (2005)

Measure the pH of the sample by using the pH meter.

#### 4.2.2 Alcohol content (In house method based on J.Chem.Metrol: 2013)

This method is to measure the concentration of ethyl alcohol by using headspace gas chromatographyflame ionization detection (HS-GC-FID) analysis.

#### 4.2.3 Benzalkonium chloride (titration)

Determination of the anionic active matter in a medium consisting of an aqueous and a chloroform phase by titration with a standard volumetric cationic-active solution (benzethonium chloride) in the presence of an indicator which consists of a mixture of a cationic dye (dimidium bromide) and an anionic dye (acid blue 1).









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 201501024971 (1351624-4)
 SAMM No. 752
 S0160102477 (135162-4)

SAMM 752 MY CO2 CERTIFICATION SDN BHD 2016/0102013 (1197752-30 MY CO2 CERTIFICATION PTE LTD 201900394 MY CO2 SDN BHD

Lengkok Kikik 1, Taman Inderawasih, 13600 Perai, Penang, Malaysia.
 Jalan Sepadu B25/B, 40400 Shah Alam, Selangor, Malaysia.
 Jalan Molek 1/8, Taman Molek, 81100 Johor Bahru, Johor, Malaysia.
 enquiry@myco2.com.my www.myco2.com.my

5.0 RESULTS

The analysis results are presented in the following table;

		Month			
Davamatana	Specification	0 Month	3 <sup>rd</sup> Month	6 <sup>th</sup> Month	
rarameters		(29/11/21)	(28/02/22)	(29/05/22)	
Appearance*	NA	Cloudy	Cloudy	Cloudy	
	INA	colourless solution	colourless solution	colourless solution	
Odor*	NA	Characteristic odor	Characteristic odor	Characteristic odor	
pН	NA	6.1	6.0	6.0	
Alcohol content (ppm)	NA	ND < 0.1	ND < 0.1	ND < 0.1	
Benzalkonium chloride*	NA	0.17	0.24	0.33	
(% w/v)	INA	0.17	0.24		

i) \* indicate not SAMM accredited.

ii) NA indicate not applicable due to no specification provided/refer to.

iii) ND indicate not detected

#### **Physical stability**

The physical stability of sample proved to be unchanged after  $6^{th}$  months of storage under accelerated conditions at  $40 \pm 2^{\circ}$ C,  $75 \pm 5\%$  RH

#### **Chemical stability**

Based on the chemical stability result, pH of the product has some variations while for benzalkanium chloride showing increasing from 0 month till 6<sup>th</sup> month of accelerated conditions. No alcohol content was detected during the 6 month of accelerated conditions.

#### 6.0 CONCLUSION

Based on the tabulated results as shown above, this product is an alcohol free product.

#### 7.0 **REFERENCES:**

1) Drug registration guidance document (DRGD), third edition, July 2022

Prepared by:

LIM WUI CHEN Quality executive (Food Analyst No: MJMM 0555)

Checked by:

OOI KAH WAI Technical Manager (IKM No.: L/2452/7352/16)