



# MATERIAL TEST RESULT

|              |                                   |
|--------------|-----------------------------------|
| MESSRS       | UNIMECH ENGINEERING (M) SDN. BHD. |
| JOB NAME     |                                   |
| JOB No.      |                                   |
| P.O.No.      | APO-2004-007                      |
| PRODUCT CODE | (TR)SZA<ZOP02>1                   |
|              |                                   |

Certificate No.  
1020329222-005-01-01-Z1

Date : 2020/07/21



|            |                      |               |          |
|------------|----------------------|---------------|----------|
| Figure     | SZA<ZOP02>1          | Valve No.     |          |
| Material   | JIS H 3250 C 3771 BE | Item No.      | 5        |
| Charge No. | Display No.          | Name of Parts |          |
| 1 270219   |                      | BODY          | BODY CAP |
| 2          |                      |               |          |
| 3          |                      |               |          |
| 4          |                      |               |          |

**CHEMICAL COMPOSITION %**

| Element | Cu   | Pb  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---------|------|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Spec.   | 57.0 | 1.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|         | 61.0 | 2.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1       | 59.0 | 1.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2       |      |     |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3       |      |     |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4       |      |     |  |  |  |  |  |  |  |  |  |  |  |  |  |

  

| Element | Fe+Sn | Zn        |  |  |  |  |  |  |  |  |  |  |  |  |
|---------|-------|-----------|--|--|--|--|--|--|--|--|--|--|--|--|
| Spec.   | Max   | Remainder |  |  |  |  |  |  |  |  |  |  |  |  |
|         | 1.0   |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 1       | 0.3   | REM.      |  |  |  |  |  |  |  |  |  |  |  |  |
| 2       |       |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 3       |       |           |  |  |  |  |  |  |  |  |  |  |  |  |
| 4       |       |           |  |  |  |  |  |  |  |  |  |  |  |  |

**TENSION TEST**

**IMPACT TEST**

| Item  |  |  | Tensile str. | Elongation |  |  |  |  |  |
|-------|--|--|--------------|------------|--|--|--|--|--|
| Unit  |  |  | N/mm2        | %          |  |  |  |  |  |
| Spec. |  |  | Min          | Min        |  |  |  |  |  |
| 1     |  |  | 315          | 15         |  |  |  |  |  |
| 2     |  |  | 434          | 33         |  |  |  |  |  |
| 3     |  |  |              |            |  |  |  |  |  |
| 4     |  |  |              |            |  |  |  |  |  |

| Item  |  |  |  |  |  |  |  |  |  |
|-------|--|--|--|--|--|--|--|--|--|
| Unit  |  |  |  |  |  |  |  |  |  |
| Spec. |  |  |  |  |  |  |  |  |  |
| 1     |  |  |  |  |  |  |  |  |  |
| 2     |  |  |  |  |  |  |  |  |  |
| 3     |  |  |  |  |  |  |  |  |  |
| 4     |  |  |  |  |  |  |  |  |  |

**HEAT TREATMENT °C**

| Spec. |  |  |  |  |
|-------|--|--|--|--|
| 1     |  |  |  |  |
| 2     |  |  |  |  |
| 3     |  |  |  |  |
| 4     |  |  |  |  |

N:Normalizing      A:Annealing      T:Tempering      Q:Quenching      AC:Air Cooling  
 WQ:Water Quenching      OQ:Oil Quenching      WC:Water Cooling      FC:Furnace Cooling      ST:Solution Treatment

**REMARKS**

JIS G 0415 2.2

Reviewed by \_\_\_\_\_

**KITZ CORPORATION**  
 QC Manager