## CERTIFICATE OF ANALYSIS BASELINE<sup>®</sup> Perchloric Acid

| 1A                  |   | PRODU               | JCT NU               | MBER:                | BA-02               |                    | LOT NUMBER: 2204090 ASSA |                    |                           |                     |                     | AY (HCIO <sub>4</sub> , w/w): 68 |                     |                      | %                   |  |    |
|---------------------|---|---------------------|----------------------|----------------------|---------------------|--------------------|--------------------------|--------------------|---------------------------|---------------------|---------------------|----------------------------------|---------------------|----------------------|---------------------|--|----|
| 3 Li<br><1<br>11 Na | average of three and uots subsampled from three samples representative of the lot. The samples are slowly |                     |                      |                      |                     |                    |                          |                    |                           |                     |                     |                                  |                     |                      |                     |  |    |
| <50                 | <20   | times the<br>3B     | standard de<br>4B    | eviation of th<br>5B | ne blank are<br>6B  | shown with<br>7B   | "<", no blanl            | k value is su<br>8 | btracted.                 | 1B                  | 2B                  | <100                             |                     |                      |                     |  |    |
| <b>19 к</b><br><20  | <b>20 Ca</b><br><100  | <b>21 Sc</b><br><20 | <b>22 T</b> i<br><20 | <b>23 V</b><br><20   |                     | <b>25 Mn</b><br><5 | <b>26 Fe</b><br><100     | 27 Co<br><5        | <mark>28 Ni</mark><br><30 | <b>29 Cu</b><br><20 | <b>30 Zn</b><br><20 | <b>31 Ga</b><br><5               |                     | <b>33 As</b><br><100 |                     |  |    |
| <b>37 Rb</b><br><10 | 38 Sr<br><1   | <b>39 Y</b><br><1   | <b>40 Zr</b><br><3   | <b>41 Nb</b><br><10  | <b>42 Mo</b><br><10 |                    |                          | <b>45 Rh</b><br><5 | <b>46 Pd</b><br><10       | <b>47 Ag</b><br><5  | 48 Cd<br><1         | <b>49 In</b><br><1               | <b>50 Sn</b><br><20 | <b>51 Sb</b><br><50  | <b>52 Te</b><br><10 |  | η. |
| 55 Cs<br><1         | <b>56 B</b> a<br><20  | 57 La<br><1         | 72 Hf<br><1          | <b>73 Ta</b><br><30  | <b>74 W</b><br><20  |                    |                          |                    | 78 Pt<br><1               |                     |                     | 81 TI<br><1                      | 82 Pb<br><2         | 83 Bi<br><2          |                     |  |    |

## ALL VALUES ARE REPORTED IN PARTS PER TRILLION (PPT)

| KEY (<br>(1) (2) ( | <ol> <li>Atomic Number</li> <li>Elemental Symbol</li> </ol>                               | 58 Ce<br><1          | <b>59 Pr</b> | 60 Nd<br><1  | 62 Sm<br><1 | 63 Eu<br><1 | 64 Gd<br><1 | 65 Tb<br><1 | 66 Dy<br><1 | 67 Ho<br><1 | 68 Er<br><1 | 69 Tm<br><1 | 70 Yb<br><1 | 71 Lu<br><1 |
|--------------------|---|----------------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                    | <ul> <li>(3) Concentration (mean<br/>in ppt)</li> <li>(4) 1 Standard Deviation</li> </ul> | <b>90 Th</b><br><0.1 |              | 92 U<br><0.1 |             |             |             |             |             |             |             |             |             |             |
|                    | (N=3)   | 0.11                 |              | 0.1          | 1.0         |             |             |             |             |             |             |             |             |             |

| Release Date: | January 25, 2005 |
|---------------|------------------|
| Expiry Date:  | January 25, 2008 |



B M<sup>c</sup> Kelvey Dr. B. McKelvey QA/QC Manager



## **Product Integrity:**

Based on extensive testing results, SEASTAR CHEMICALS INC have found our products, unopened and sealed, maintain the certified integrity, or product quality, for a minimum of three years under the following conditions:

•Stored at room temperature, maximum range 15°C (59°F) to 25°C (77°F).

Minimum exposure to light.

For limited time, storage/transport temperature range 5°C (41°F) to 35°C (95°F)

Upon opening the product, the product's integrity will depend on proper handling and exposure to contaminants. The product has been bottled under CLASS 100 clean room conditions, to maintain the certified quality it should be used under these conditions.

Prior to opening or storing this product be sure to consult the Material Safety Data Sheet (MSDS) Section 7 Handling and Storage to ensure safe storage and handling with regards to this hazardous material. This information must be understood prior to its use or storage.

A further note to reduce trace metal contamination: The inner pack of plastic bags and bottle should be opened under CLASS 100 particle conditions to maintain the integrity of the product. The use of plastic gloves, hair net and a clean room suit is also advised.

Appropriate safety precautions must be taken as well as wearing the required safety apparel. A properly functioning fumehood, protection for eyes, hands, feet and exposed skin must also be worn. All of these items must conform to local/regional/national regulatory requirements.

Dr. B. McKelvey QA/QC Manager

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