

## **Identification of Potential Elemental Impurities Statement**

| Manufacturer Names & Add  | resses:  |  | Contact Phone Number: 302-995-3400  Contact Email Address: pszawislak@ashland.com  Date Form Filled Out: April 6, 2015 |  |  |  |
|---|--|--|--|--|--|--|
| ISP Technologies Inc.<br>4501 Attwater Ave.<br>Texas City, TX 77590 USA | ISP Chemicals LLC<br>455 North Main Street<br>Calvert City, KY 42029 |  |  |  |  |  |
|   | povidone   |  | antPlant derived _X_SyntheticFermentation derived  |  |  |  |
|   |  |  |  |  |  |  |

| Elemental<br>Impurity  |    | Class | Likely to be Present |      |           | If Known, Please<br>Identify the<br>Expected<br>Concentration<br>/Units (or Range) | Analytical Method<br>Used (and Limit of<br>Detection if Available)                       | Comments regarding source of information (i.e.; frequency of testing, process understanding, etc.) |
|------------------------|----|-------|----------------------|------|-----------|--|--|--|
| Arsenic<br>(inorganic) | As | 1     | Yes 🗌                | No 🗵 | Unknown 🗌 | <0.5 ppm   | ICP-MS (detection limit<br>is 0.5 ppm for ALL<br>elements)                               | Test every lot   |
| Cadmium                | Cd | 1     | Yes 🗌                | No ⊠ | Unknown 🗌 | <0.5 ppm   | ICP-MS   | Test every lot   |
| Mercury<br>(inorganic) | Hg | 1     | Yes 🗌                | No 🗵 | Unknown 🗌 | <0.5 ppm   | ICP-MS   | Test every lot   |
| Lead                   | Pb | 1     | Yes 🗌                | No ⊠ | Unknown 🗌 | <0.5 ppm   | ICP-MS   | Test every lot   |
| Cobalt                 | Со | 2A    | Yes 🗌                | No ⊠ | Unknown 🗌 | <0.5 ppm   | ICP-MS   | Test every lot   |
| Nickel                 | Ni | 2A    | Yes 🗌                | No ⊠ | Unknown 🗌 | <0.5 ppm   | ICP-MS   | Test every lot   |
| Vanadium               | V  | 2A    | Yes 🗌                | No 🗵 | Unknown 🗌 | <0.5 ppm   | ICP-OES (limit of<br>detection is 0.5 ppm for<br>ALL elements unless<br>otherwise noted) | 16 samples   |
| Silver                 | Ag | 2B    | Yes 🗌                | No ⊠ | Unknown 🗌 | <0.5 ppm   | ICP-MS   | Test every lot   |
| Gold                   | Au | 2B    | Yes 🗌                | No 🛚 | Unknown 🗌 | <0.5 ppm   | ICP-OES  | 16 samples   |



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|-----------------------|----|-------|----------------------|------|--|--|--|----------------|
| Iridium               | Ir | 2B    | Yes 🗌                | No 🛚 | Unknown 🗌  | <0.5 ppm   | ICP-OES  | 16 samples     |
| Osmium                | Os | 2B    | Yes 🗌                | No 🛚 | Unknown 🗌  | <0.5 ppm   | ICP-OES  | 16 samples     |
| Palladium             | Pd | 2B    | Yes 🗌                | No 🛚 | Unknown 🗌  | <0.5 ppm   | ICP-OES  | 16 samples     |
| Platinum              | Pt | 2B    | Yes 🗌                | No 🛚 | Unknown 🗌  | <0.5 ppm   | ICP-OES  | 16 samples     |
| Rhodium               | Rh | 2B    | Yes 🗌                | No 🛚 | Unknown 🗌  | <0.5 ppm   | ICP-OES  | 16 samples     |
| Ruthenium             | Ru | 2B    | Yes 🗌                | No 🛚 | Unknown 🗌  | <0.5 ppm   | ICP-OES  | 16 samples     |
| Selenium              | Se | 2B    | Yes 🗌                | No 🗵 | Unknown 🗌  | <1.3 ppm   | ICP-OES (limit of detection 1.3 ppm)   | 16 samples     |
| Thallium              | TI | 2B    | Yes 🗌                | No 🛚 | Unknown 🗌  | <0.5 ppm   | ICP-OES  | 16 samples     |
| Barium                | Ва | 3     | Yes 🗌                | No 🛚 | Unknown 🗌  | <0.5 ppm   | ICP-OES  | 16 samples     |
| Chromium              | Cr | 3     | Yes 🗌                | No ⊠ | Unknown 🗌  | <0.5 ppm   | ICP-MS   | Test every lot |
| Copper                | Cu | 3     | Yes 🗌                | No ⊠ | Unknown 🗌  | <0.5 ppm   | ICP-MS   | Test every lot |
| Lithium               | Li | 3     | Yes 🗌                | No 🛚 | Unknown 🗌  | <0.5 ppm   | ICP-OES  | 16 samples     |
| Molybdenum            | Мо | 3     | Yes 🗌                | No ⊠ | Unknown 🗌  | <0.5 ppm   | ICP-MS   | Test every lot |
| Antimony              | Sb | 3     | Yes 🗌                | No ⊠ | Unknown 🗌  | <0.5 ppm   | ICP-MS   | Test every lot |
| Tin                   | Sn | 3     | Yes 🗌                | No 🛚 | Unknown 🗌  | <0.5 ppm   | ICP-MS   | Test every lot |

Reference: ICH Q3D Guideline for Elemental Impurities, Dec 2014