

## **Starsonic SS1, Starsonic SS2(A), Starsonic SS3, Starsonic SS4**

### **Generally**

Ultrasonic couplants Starsonic SS1-4 are intended for providing of perfect coupling between the probe and tested surface during nondestructive ultrasonic testing. Four types of couplants are manufactured to make testing of all metallic and nonmetallic materials possible. Starsonic SS2 and Starsonic SS2A also include anti-corrosion additives.

Starsonic couplants are inexpensive replacement of standard water-based gels.

### **Starsonic SS1 and SS2(A)**

Furthermore, they are highly mobile due to a powdered form (the SS1, the SS2) and a simple preparation.

Powder mixed with water creates viscous couplant suitable for application on rough and smooth surfaces. In recommended ratio, couplant forms continuous and viscous film even on vertical surfaces. Couplant is able to create acoustic coupling instantly, virtually without any losses between the probe and tested surface.

Starsonic gel couplants have minimal sulfur and halogen content and therefore do not cause dot corrosion. Prepared gel is water based and does not contain any strong solvents, which might damage the painted, plastic or rubberized surfaces.

Starsonic couplants do not contain toxic additives and their effects on the skin are negligible. Long-lasting or continuous contact action may cause skin drying. Use of barrier cream or gloves ensures adequate protection.

Preparation: <http://www.youtube.com/watch?v=T1B0p1KIzFE>

### **Starsonic SS3**

Starsonic SS3 is gel for wider range of temperature. The SS3 is prepared to use.

### **Starsonic SS4**

Starsonic SS4 is prepared on customer's requests.

### **Application of SS1-SS2(A)**

Starsonic couplants are applied with a soft brush. Couplants are water-soluble. Their removal can be done with water or with alcohol, acetone and similar solvents. The recommended concentration for Starsonic SS1, SS2 and Starsonic Starsonic SS2A couplants is 50g of powder for one liter of water.

Couplant is formed after approx. 3 minutes stirring. Couplant is nonflammable and can be applied at temperatures from 0°C up to 50 °C. Vaporizing starts at temperatures over 50 °C.

### **Application of SS3**

Starsonic couplant is applied with a soft brush. Couplant is water-soluble. Its removal can be done with water or with alcohol, acetone and similar solvents. Ultrasonic gel is prepared to use. Couplant is nonflammable and can be applied at temperatures from -10°C up to +100 °C. Vaporizing starts at temperatures over 100 °C.

### **Characteristic data**

State: white powder SS1,SS2(A), yellow gel SS3

Density: approx. 0.8 g/cm<sup>3</sup> at 20 °C

Content of sulfur and chlorine: less than 50 ppm

Content of fluorine and bromine: less than 10 ppm

Ash: less than 0.1 %

Element content analysis corresponds to the ASME standard for pressure vessels Section 5.

### **Storage**

Temperature: 5-40 °C. Protect from moisture