Orca Composites

**DESCRIPTION**

Orca Solutions S-924 is a solution of methyl ethyl ketone peroxides and cumyl hydroperoxide in phlegmatizer. Orca S-924 is a liquid polymerization initiator for the room temperature cure of specialized unsaturated polyester and vinyl ester resins with the following advantages/properties.

- Low Peak exotherm
- Longer working time (gel time)
- Excellent final cure
- Eliminates in-plant mixing of peroxides
- Low impurity levels (water, hydrogen peroxide, MEK)

**APPLICATION**

Orca Solutions S-924 is an excellent liquid polymerization initiator for the room temperature cure of unsaturated polyester and vinyl ester resins, when a low peak exotherm is desired. Gel times will be slower compared to standard MEKP products, but final cured resin hardness is often better than for resins initiated with standard MEKP’s.

**TYPICAL PROPERTIES**

Active Oxygen.................................................9.0 %, max.
Form ..........................................................Liquid
Color .........................................................Red
Specific Gravity @ 25°/4°C.................................1.10
Fire point ....................................................150°F/66°C, min.
Flash point (SETA C.C.) ................................. 170°F, min.
Soluble in ..................................................Oxygenated organic solvents
Slightly soluble in ........................................Water

<table>
<thead>
<tr>
<th></th>
<th>Gel time</th>
<th>Peak Exotherm</th>
<th>Barcol Hardness @ 3 hrs.</th>
<th>Barcol Hardness @ 5 hrs.</th>
<th>Barcol Hardness @ 24 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>S-924</strong></td>
<td>29.7 min.</td>
<td>313°F</td>
<td>5-10(D)</td>
<td>55-60(D)</td>
<td>15-20(4)</td>
</tr>
</tbody>
</table>

**SAFETY**

See appropriate Material Safety Data Sheet for guidelines.

**STORAGE**

- Storage at 80°F or below is recommended. Storage below 70°F is recommended for maximum shelf life.
- Store in original containers away from flammables and all sources of heat, sparks, or open flame.
- Never store away from explosive fumes or oxygen.
- Never store away from oxidizing agents or strong acids or bases.
- Leaking containers – Remove and isolate in a safe area. Re-package or dispose immediately (see spills).
- Never store in refrigerators containing food and/or beverages.
- Consult National Fire Protection Association (NFPA) Code 432 and/or local regulatory agencies.
- Rotate stock, use oldest date first.

**HANDLING**

- Inform all personnel of procedures for safe handling and review MSDS with them.
- Remove from storage area only the amount needed for one shift.
- Wear safety glasses or goggles and chemical resistant gloves.
- Keep away from heat, flames, and sparks.
- Avoid breathing vapors.
- Dilution is not recommended.
- Never add peroxides directly to promoters or vice-versa; violent decomposition can occur.
- Prevent contamination such as contact with dust, over spray, wood, and combustible material.
- Avoid contact with materials other than polyethylene, polypropylene, Teflon®, Tygon®, or similar materials, glass or glass-lined steel, and 304 or 316 stainless steel or equivalent.

**FIRST AID**

- EYES – Flush immediately with large amounts of fresh water and continue washing for at least 15 minutes. Medical attention is needed.
- SKIN – Wash with soap and water.
- INGESTION – Administer large amounts of milk or water and call a physician immediately. Do not induce vomiting. As an aid to the physician, suggest calling your local Poison Control Center.

**SPILLS**

- Clean up immediately by absorbing with inert material – vermiculite or sand.
- After absorbing, moderately wet immediately with water and place in a clean plastic bag inside a plastic pail.
- Dispose of immediately in accordance with local, state, and federal regulations.

**FIRE**

- Peroxides ignite readily and burn vigorously with acceleration.
- Use water from a safe distance – preferably with a water-fog nozzle.
- For very small fires, an extinguisher with carbon dioxide, foam, or dry chemical may be effective.
- In case of fire in or near a storage area, cool stored containers with water spray.

**PACKAGING, SHIPPING & AVAILABILITY**

- The standard package sizes of Orca S-924 MEKP are cases of 4x8 lb. and 4x4 kg polyethylene bottles; and 40 lb. or 20 kg Hedpacks. For custom package sizes, please contact your local distributor or Orca Composites.
- Classification – Please refer to the specific Orca S-924 MEKP Material Safety Data Sheet under section 14, Shipping Description.
- Orca S-924 MEKP is available through a nation-wide distributor network. Call Orca Composites, for the name of the distributor in your area.

**NOTE:** MSD’s for all our products may be requested through the website www.orcacomposites.com

The information herein is general information designed to assist customers in determining whether Orca products are suitable to their applications. Orca products are intended for sale to industrial and commercial customers. We require customers to inspect and test our products before use and to satisfy themselves as to contents and suitability for their specific applications. Nothing herein constitute any warranty express or implied, including any warranty of merchantability or fitness for a particular purpose, nor is any protection from any law or patent to be inferred. The exclusive remedy for all proven claims is limited to replacement of our materials and in no event shall we be liable for special, incidental or consequential damages.

ORCA COMPOSITES - Seattle WA, 98134 – www.orcacomposites.com