PREPARING AN EMPTY HYDROGEN PEROXIDE RAILCAR FOR SHIPMENT

When an empty hydrogen peroxide railcar is returned to Solvay Chemicals, Inc., the user becomes the shipper of record. The shipper is responsible for the safe shipment of the railcar and for complying with transportation regulations.

The following list describes the checks to be made before an empty railcar is shipped back to Solvay Chemicals.

**Inspection Items Before Release of Empty Railcar:**

The inspections which the railcars receive prior to shipment help maintain the fleet integrity. This ensures that the railcars you receive will meet Solvay Chemicals quality standards.

**Stencils and Markings:**
The railcar must be legibly marked to meet all transportation regulations. All inspection dates must be current.

**Placards:**
The railcar should have four OXIDIZER placards - one on each end and one on each side. These must be legible and not faded. Check to see if the holders and placards are securely fastened to the railcar.

**Preparation for shipment:**
All fittings should be tightened and sealed for return to Solvay to prevent damage. These items are listed mainly for safety reasons. Look for any loose bolts, weld breaks or any other suspicious items that might fail on handrails, walkways and brakes.

**Seals:**
Solvay Chemicals recommends applying seals on all railcar openings (typically the manway and either the eductor line blind flange or the eductor Bonnett). Natural Resource Canada requires the application of seals for transport in Canada. If numbered seals are used, Solvay Chemicals recommends adding the seal numbers to the Bill of Lading or other shipping documents sent to the receiver, as well as recorded on the inspection checklist.

**Paperwork:**
Upon request, return paperwork is sent from Solvay Chemicals at time of delivery. Ensure it complies with all transportation regulations.

**Checklist:**
A suggested checklist is attached that may be faxed (713-524-9032) or emailed (hn-sci.logistics@solvay.com) to Solvay Chemicals if the railcar has mechanical issues. If another checklist is already in use, please use that one. For assistance, call Solvay Chemicals Customer Service at 1-800-443-2785. Pictures of any issues are always appreciated.

Solvay Chemicals recommends that the shipper take a picture of the secured railcar before shipment.
To: Solvay Chemicals Corporate Logistics FAX #: 713/525-7880 or email: Hn-sci.Logistics@solvay.com

<table>
<thead>
<tr>
<th>Hydrogen Peroxide Empty Railcar Return Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date: ___________________________</td>
</tr>
<tr>
<td>Railcar #: ___________________________</td>
</tr>
<tr>
<td>H₂O₂ Grade: ___________________________</td>
</tr>
<tr>
<td>General Appearance: ___________________________</td>
</tr>
<tr>
<td>Railcar is contaminated</td>
</tr>
<tr>
<td>Paint is damaged</td>
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<tr>
<td>Handrails and walkways are damaged</td>
</tr>
<tr>
<td>Bolts on headshields, walkways, etc. are in place and tight.</td>
</tr>
<tr>
<td>Verify that all stencils and markings are legible:</td>
</tr>
<tr>
<td>&quot;Hydrogen Peroxide&quot;</td>
</tr>
<tr>
<td>&quot;Not For Flammable Liquids&quot;</td>
</tr>
<tr>
<td>&quot;DOT Numbers&quot;</td>
</tr>
<tr>
<td>Railcar inspection date is valid</td>
</tr>
<tr>
<td>Placards:</td>
</tr>
<tr>
<td>4 yellow and black OXIDIZER placards in place (one on each side and on each end)</td>
</tr>
<tr>
<td>Placards legible, unobstructed and not faded</td>
</tr>
<tr>
<td>Placards and holders securely fastened</td>
</tr>
<tr>
<td>Preparation for shipment:</td>
</tr>
<tr>
<td>Check all gaskets are in place and sealed</td>
</tr>
<tr>
<td>Replace the blind flange</td>
</tr>
<tr>
<td>Tighten the eduction tube bolts</td>
</tr>
<tr>
<td>Tighten the manway bolts</td>
</tr>
<tr>
<td>Tighten the continuous vent cap</td>
</tr>
<tr>
<td>Check that the rupture disc is in good condition</td>
</tr>
<tr>
<td>Verify safety chains are secured</td>
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</tbody>
</table>
Rinse the exterior of any spillage

Apply seals to manway and eductor

**Prepare the proper shipping papers:**

Received copy in delivery paperwork

Ship railcar

**Other Information:**

The previous information is based upon our current knowledge and experience of our product and is not exhaustive. It applies to the product as defined by the specifications. In case of combinations of mixtures, one must confirm that no new hazards are likely to exist. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and integrity of the work environment. (Unless noted to the contrary, the technical information applies only to pure product).

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