1. **PURPOSE**: This specification presents the requirements and procedures for protecting material and equipment during export shipment and multiple handling. It applies when material is to be packed and shipped in accordance with Saudi Aramco Packing Specifications 8314-03 to 8314-08. In some instances, these requirements are designed to provide protection during outside storage in Saudi Arabia.

2. **USE**: This specification is a statement of minimum requirements. The vendor's own experience and practice should be used to determine whether certain items require more than the minimum standards in this specification to ensure safe delivery to their final destination. The specification may also be used by Saudi Aramco receiving staff at loading ports to determine if goods are adequately packed for export.

3. **REQUIREMENTS**: These requirements are in addition to any that may be in the material descriptions or other Saudi Aramco specifications. Deviation from these requirements is not allowed without the Buyer's prior written approval. Substitution by the vendor's standard packing which provides equal or better protection at a lesser or equal cost will be allowed after the Buyer's prior review and written approval.

3.1 Atmospheric protection: All items require protection from rain, sea spray, condensation, high humidity, high temperature, and fine dust.

3.1.1 All surfaces subject to corrosion must be treated with an appropriate protective compound.

3.1.2 Material that must be sealed against atmospheric intrusion must be placed in moisture-/vapor-proof packages, protected with a suitable desiccant.

3.1.3 All openings in equipment or material susceptible to atmospheric damage must be securely sealed.

3.2 Packing: The pack must adequately protect the material prior to, during and after handling, stacking and shipping.

3.2.1 All packaging, including protectors and atmospheric inhibitors, must be sound and undamaged after packing.
3.2.2 Finished and coated surfaces must be protected from rubbing or abrasion.

3.2.3 Weight must be evenly distributed within each pack, with lighter items on top.

3.2.4 If an item consists of more than one component, the components must be either assembled or packaged together, whichever is appropriate, as a single unit of issue. Components should only be assembled as a single unit in a pack when it will not negatively impact safe and cost-effective packing.

3.2.5 Items in the pack must be prevented from damaging each other.

3.2.6 Loose and moving parts within an item may require temporary securing while in transit; for example, drawers in furniture, rotors in drivers, header boxes in air-cooled heat exchangers. Clear warning must be indicated on items to remove all securing devices before start-up.

3.2.7 Securing devices applied to articles packed must not abrade or otherwise damage the material.

3.3 Hazardous materials: Materials which are subject to International Maritime Organization (IMO), International Air Transport Association (IATA), Saudi Arabian Standards Organization (SASO), United States Department of Transportation (DOT), International Civil Aviation Organization (ICAO) or other industry or government organization directives or regulations require that the vendor must be in full compliance with those directives in the treatment of the materials.

3.3.1 All hazardous materials must be packed separately from other nonhazardous materials.

3.3.2 All hazardous materials must be identified by the proper shipping name and packaged, packed, and labeled in accordance with the applicable directives, regulations, and specifications established in paragraph 3.3 and the purchase order.

3.3.3 Deviation from these requirements is not permitted without prior written approval from Saudi Aramco Dhahran Materials & Logistics Department/Traffic Division, Dhahran.

3.4 Marking: Individual items, packages, packs, and unitized loads must be marked in accordance with instructions provided with the Saudi Aramco purchase order.

3.5 Use of packing specifications:
3.5.1 Saudi Aramco's packing mode for items in the "Request for Quotation/Purchase Order" is indicated in the RFQ/PO document; the corresponding packing specifications are attached (Part II).

3.5.2 Consolidation of suitable material into a single unit is preferred up to a gross weight limit of 5 tonnes. (Material with different purchase order numbers is not to be packed together unless authorized by the Buyer. Purchase order line-item numbers should preferably be packed separately, when possible, without increasing the packing cost.)

3.5.3 If the indicated packing mode is unsuitable for any reason such as order size or nature of material, the Buyer must be contacted.

3.5.4 This specification does not apply to shipments weighing less than 25 kg (55 lb) net weight. Such small shipments require heavy standard domestic pack suitable for containerization, air or overland shipment in accordance with Saudi Aramco Packing Specification 8314-00.

3.6 Exceptions: Deviation from this specification is not allowed without the Buyer's prior written approval.