



Electric Vehicle (EV) Checklist

The following information should be provided by Customer and will be checked by Shipping Lines, Transporters and/or Port Authorities before accepting the EV's for transportation:

- ☐ **Handling Instructions** (start/stop procedure, location of isolation switch if available, procedure to be implemented to minimize battery discharge during transportation etc.)
- ☐ **History of repair** undertaken on the high voltage battery, or any other previous battery damage must be declared, and authorised by Shipping Line for loading. A minimum 24hr time span is required between the completion of repair and the loading.
- ☐ **Location of Auxiliary Battery**, which is used for jump starting the vehicles including providing power supply to controls, if required.
- ☐ **Emergency Contact List** for technical support in transshipment/discharging ports.
- ☐ **Towing Procedure** approved by manufacturer in case battery drained.
- ☐ **MIN/MAX State of Charge (SOC)** recommended by manufacturer for marine transportation. The lower end of SOC should ensure enough charge for loading, discharging operations including transshipment port if any and battery self-drain during waiting time in port. The highest allowed SOC should not exceed 50% in relation to the full maximum energy capacity (kWh) of the battery. Based on the advice from battery experts the risk of that a battery goes into state of thermal runaway is considerably reduced when the SOC is below 50%. If Customer requests upper end of SOC over 50%, the Customer should provide reason why this cargo requires SOC over 50%.
- ☐ **Average Daily Battery Drain** during transportation. If portable generator can be used for charging the vehicle:
 - Recommended generator's specification.
 - Cars' plug type and/or original charger socket type.
- ☐ **Material Safety Data Sheet (MSDS)** for the batteries including details of firefighting measures, gas control processes and any necessary PPE for heat, flame, and/or toxic gas which may be emitted from the vehicle.
- ☐ **Certificate** confirming that all vehicles with a lithium-ion battery, have successfully passed pressure, temperature, crush, and impact tests as described in the UN 38.3 code.