

RECOMMENDATIONS

Based on the findings of this investigation, there are lessons to be learned. The Dutch Safety Board has observed that there are gaps in the production process. The fact that an accident has not previously occurred with this type of flare means that it cannot be generically stated that there was a clear system deviation in production. Since an accident has now occurred and given the importance of air temperature and humidity in the phase of filling and pressurizing the engines with mixture that ultimately forms the solid propellant, the Dutch Safety Board makes the following recommendations:

To Lecea as the manufacturer of the Pirolec flare:

1. Integrate control measures into the production process to prevent the prepared mixture from being exposed to excessive ambient temperatures and/or excessive humidity for too long.
2. Integrate control measures into the process to ensure that the cardboard inlay is always present in the motor unit.

To Lloyd's Register Marine Deutschland as the notified body.

3. Verify whether the working method and the prescribed quality steps, on the basis of which the type approval for this type of flare was issued, are still valid. Include monitoring of air temperature and humidity in the elaboration of this recommendation.