



Bulletin 23 - 11/97 - Bulk Urea Paint Contamination

Following a claim in A1 we have found out that contamination of bulk urea (granular and prilled) with flakes of hold paint is becoming more of a common occurrence. The problem is not caused by the use of incorrect paints, but more by poor condition or by the fact that paint has been improperly applied, with steel surfaces having not been properly prepared.

This is not helped by the fact that urea is made from a synthesis of ammonia and carbon dioxide. In transit some ammonia is vented and this can work its way under loose paint. Since ammonia is a scouring/cleaning agent it attacks the bond between the paint and the steel surface.

This problem is made worse if the cargo is wet and/or there is water or condensation in the hold. This is because the scouring effect of ammonia is much higher when it is in a water solution.

We understand that recommendations are that ships carrying this type of cargo should not ventilate during the loaded voyage.

If ventilating does take place it will really only remove the ammonia at the top of the stow and could increase the risk of an ingress of sea air with high moisture content which could increase the risk of water condensation within the cargo.

Source of Information: Peter Astbury A1