

Ship Type: All Trade Area: China

## Bulletin 469 - 06/06 - Mould Damaged Rice - China

The Association is aware of a series of incidents involving cargoes of old Chinese rice (1997/1998 season) being rejected by cargo receivers. It is not unusual for old rice to be cleaned and sold but recent claims indicate the age of the rice, giving rise to enhanced mould growth and condensation damage, is the primary reason for its poor condition at discharge.

The most recent incident involved a ship carrying 43,000mt of bagged rice to W Africa. On arrival it was discovered that the cargo was in poor condition and \$2.4 million was demanded from the owners in security.

Although wetting had occurred to bags stowed on the tank tops, a large proportion of the damaged cargo was found in bags free of staining, indicating that ship's sweat was not the cause of damage. Inside the clean bags, damaged cargo was found to be affected by a light powdery blue mould thought to be Aspergillus flavus. In total, 1,500 50kg bags of rice were severely damaged and with no residual value.

Examination of the cargo in storage, at the discharge port, found the core temperature of the bags ranged between 24°C and 31°C, and moisture measurements of the rice gave readings of up to 15.6%. Deterioration in the rice in the bags which were not subject to direct wetting is consistent with a high moisture content. Rice with a moisture content of 15% is stable (borderline) at 5°C but becomes very unstable in terms of microbiological activity once the temperature is raised to 25°C. Warehouse temperatures were around 32°C.

While cargo sweat may have contributed to the problem of mould development within the bags, certainly in way of the stitching, the most likely cause of the cargo damage was the high moisture content of the rice cargo.

Members carrying rice from China should be aware of the problems associated with old rice and ensure the rice is properly tested before loading to ensure its quality and absence of mould.

Source of information: Loss Prevention Department

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