UK P&I CLUB

Bulletin 5 - 06/97 - Iron Carbide ex Point Lisas, Trinidad

We are advised by Nucor Iron Carbide, manufacturers of Iron Carbide in Trinidad that this is a new commodity. The following information has been received from them.

Iron Carbide is not DRI. Whereas DRI is pyrophobic, i.e.inclined to spontaneously combust at ordinary temperatures, Iron carbide is stable at ordinary temperatures because of its carbon content. Iron carbide is therefore much safer to handle than DRI. However, Iron Carbide is a carbon bearing material, slow oxidation in the presence of air is therefore possible which could, in turn, generate small concentrations of carbon monoxide. If the material is stored in a confined space, such as a ship's hold, these small concentrations may increase and the oxygen content of the hold depleted. **It is therefore recommended that the air quality inside a closed hold be tested for carbon monoxide and oxygen content before personnel are allowed to enter.** There is no potential hazard to personnel entry if the hold is open and well ventilated.

When transporting Iron Carbide by sea the following criteria should be followed:

1. Vessel's holds to be free of rustscale, clean, dry and suitable for carriage of bulk cargoes; hatch covers to be water tight;

2. Prior to loading, vessel to be examined for leakage from ballast tanks; hatch covers to be hose tested to ensure water tight integrity of holds;

3. Iron carbide at Point Lisas to be loaded by shore based gravity feeders/travelling ship loader/conveyor belt, trimmed free of expense to the vessel;

4. Iron Carbide may cause oxidation/discolouration on exposed surfaces. Decks/holds should be fresh water washed prior to loading and immediately after cargo operations completed.

Source of information - Brian Davies Ext 2428