

May 5, 2015

## Marked safety factor on Ultra High Molecular Weight Poly Ethylene (UHMWPE) rope

Tiedowns used for cargo securement must include markings that include the identifier "working load limit" or 'WLL'.

Some carriers are using UHMWPE rope that only identifies the Breaking Strength (BS) or Minimum Breaking Strength (MBS). As a result it is unknown if the number displayed on the marking is the Working Load Limit (WLL), BS or MBS.

The Minimum Breaking Strength (MBS) is the force that a given rope is required to meet or exceed in a laboratory test when it is new and unused. The Working Load (WLL) is the weight or force applied to rope in a given application. The Working Load Limit is the guideline for the maximum allowable capacity of a tiedown.

All tie downs require the words "working load limit" or letters "WLL" be included on markings identifying that the weight listed is the tiedowns WLL. This is a requirement of NSC Standard 10.

As per permit condition "Tiedowns using Ultra High Molecular Weight Poly Ethylene (UHMWPE) rope must be marked by the manufacturer with a WLL that has included a safety factor of 5 to 1; rope must be marked as such." A transition period allowed improperly marked UHMWPE rope without proper safety factor rate markings to be used provided a letter from the manufacture was in the vehicle identifying the tie down.

Effective **October 31, 2015** the letter will no longer be accepted. If using UHMWPE rope after this date, the rope must be marked with "safety factor of 5 to 1".

If you require additional information, contact the Vehicle Inspection Station (VIS) in your area or contact myself as listed below.

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