



Technical Bulletin: FORMALDEHYDE

TRAXX Corporation has a fully integrated formaldehyde test center to continually insure that the plywood meets all regulations including the stringent California laws. New materials and competitive products are evaluated by TRAXX'S trained technical staff using a variety of sophisticated laboratory equipment to measure the physical properties of plywood and nails to produce quality professional carpet tack strip and underlayment.

The formaldehyde is measured by ASTM D 5582 method by conditioning the specimen, then extracting formaldehyde in a desiccator and analyzing by spectrometer as shown below.



Conditioning Tack Strip Samples

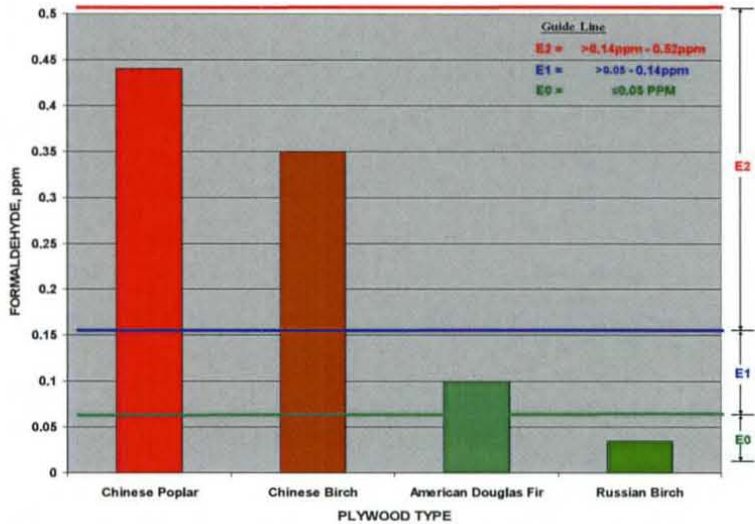


Extracting Formaldehyde



Analyzing Formaldehyde

CARPET TACK STRIP PLYWOOD
FORMALDEHYDE TEST AS PER ASTM D 5582



Test results show that TRAXX Engineered Carpet Gripper meets California Air Resources Board (CARB) Phase 1 and Phase 2 formaldehyde emission standards (less than 0.05 ppm). Whereas the imported Chinese tack strip that was tested does not meet the CARB standards.

CONTAINS FORMALDEHYDE
THIS HARDWOOD PLYWOOD PRODUCT CONTAINS FORMALDEHYDE, PHYSICAL AND HEALTH HAZARD INFORMATION IS READILY AVAILABLE FROM YOUR EMPLOYER AND FROM MATERIAL DATA SHEETS (MSDS)

Chinese manufactured plywood imported to the United States usually displays this label; it warns of the health hazards of formaldehyde.

California New Ruling
CALIFORNIA AIR RESOURCES BOARD (CARB)
Starting January 1, 2009, California will begin regulating particleboard, MDF, and hardwood plywood.
Maximum formaldehyde emission allowed for hardwood plywood is **0.08 ppm** phase 1
In January 1, 2010 the formaldehyde spec will be reduced even further to **0.05 ppm**.
American Lung Association
Formaldehyde is ranked as a probable human carcinogen.



U. S. DEPARTMENT OF LABOR
The American Conference of Governmental and industrial Hygienists (ACGIH) has established a ceiling limit for occupational exposure (Threshold Limit Value (TLV) of **0.3 ppm**
ENVIRONMENTAL PROTECTION AGENCY (EPA)
Formaldehyde may cause cancer. Can cause watery eyes, burning sensations in the eyes and throat, nausea, and difficult in breathing (**above 0.1 ppm**)
FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)
Results released from recent testing that found higher than typical indoor exposure levels of formaldehyde in travel trailers and mobile homes used as emergency housing in the Gulf Coast Region.
Formaldehyde levels measured ranged from 0.003 to 0.59 ppm.

All tests are performed in Traxx Laboratory using recognized test methods where available Test results are only intended as an aid in comparing the products tested, any other use is restricted Liability for the accuracy or the use of the data, other than the intended use is disclaimed. Additional information concerning sampling methods or test methods ma be obtained by contacting TRAXX Corporation.

