# **RoHS Designation** Halogen vs. Non-Halogen



### **RoHS & WEEE Directives**

As of July 1st 2006, certain substances are banned from inclusion in new electrical and electronic equipment.

These substances are:

- Lead
- Hexavalent chromium
- Mercury
- Polybrominated biphenyl (PBB)
- Cadmium
- Polybrominated diphenylether (PBDE)

In certain substances, limited values or exceptions apply, which are specified in EU Guidelines 2002/95/EC.

The importance of eliminating lead from cables began in the European and Asian markets.

International Regulations & Directives are in the process of eliminating lead.

#### RoHS (2002/95/EC)

(Restriction of Hazardous Substances)

Requires that manufacturers, distributors and sellers comply with eliminating certain hazardous substances from New Electrical and Electrical equipment by July 1, 2006.

All new production of standard Lapp cables are manufactured with compounds that meet the RoHS directive. These cables will be identified by the designation "pbf(+)" on the jacket print legend.

## WEEE (2002/96/EC)

Waste Electronic and Electrical Equipment - requires that manufacturers, distributors and sellers of specific appliances, and electrical equipment provide recycling and disposal facilities for their products as of August 13, 2005.

The use of non-lead compounds will not compromise the integrity of any Lapp product's ability to provide continued optimum performance.

#### Halogen vs. Non-Halogen

Halogens are present in many and wire cable compounds or they are added in as part of the flame retardant component during formulation. The interest for Non-Halogen wire and cable products in the European marketplace remains high while this is not the case in the United States. The advantage of cables that do not contain halogen is that during a fire neither high levels of smoke or corrosive gases are emitted. Non-halogen wire and cable compound formulations include antimony-based systems to replace traditional flame-retardants, which contain chlorides, fluorides and bromides.

