



ASTM International & Committee F40 on Declarable Substances in Materials

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Objectives of this Presentation

- Brief Overview of ASTM
- Committee F40 Overview
- F40 Subcommittees & Current Activities

Overview



- Global forum for the development of voluntary consensus standards
- Focus on materials, products, systems, and services
- High technical quality and market relevancy
- Guides trade in global economy



- Founded in 1898 by engineers and chemists
- Proud partner of industry and government for over 100 years
- Blending tradition with forward-thinking vision



ASTM Members

- Over 30,000 of the world's technical experts
- More than 125 countries represented
- Create standards that impact our daily lives



ASTM's Global Reach

- Consensus standards without borders
- All participants welcome
- Standards are responsive and relevant to global marketplace
- Over 40% of ASTM standards are sold outside the U.S.



Uses of ASTM Standards





Role of ASTM Standards

- Guide product design, development, market access
- Used by individual companies, research labs, government agencies
- Impact global trade, innovation and competition
- Bottom-line business implications

ASTM Technical Committees

■ 139 technical committees cover:

- Nondestructive Testing
- Consumer Products
- Nanotechnology
- Petroleum
- Construction/Building Materials & Products
- Plastics
- Homeland Security
- Unmanned Vehicles
- 3-D Imaging Systems
- Paint
- Textiles
- Environmental
- Medical Devices
- Pharmaceutical Manufacturing
- Steel...





ASTM Consensus Process

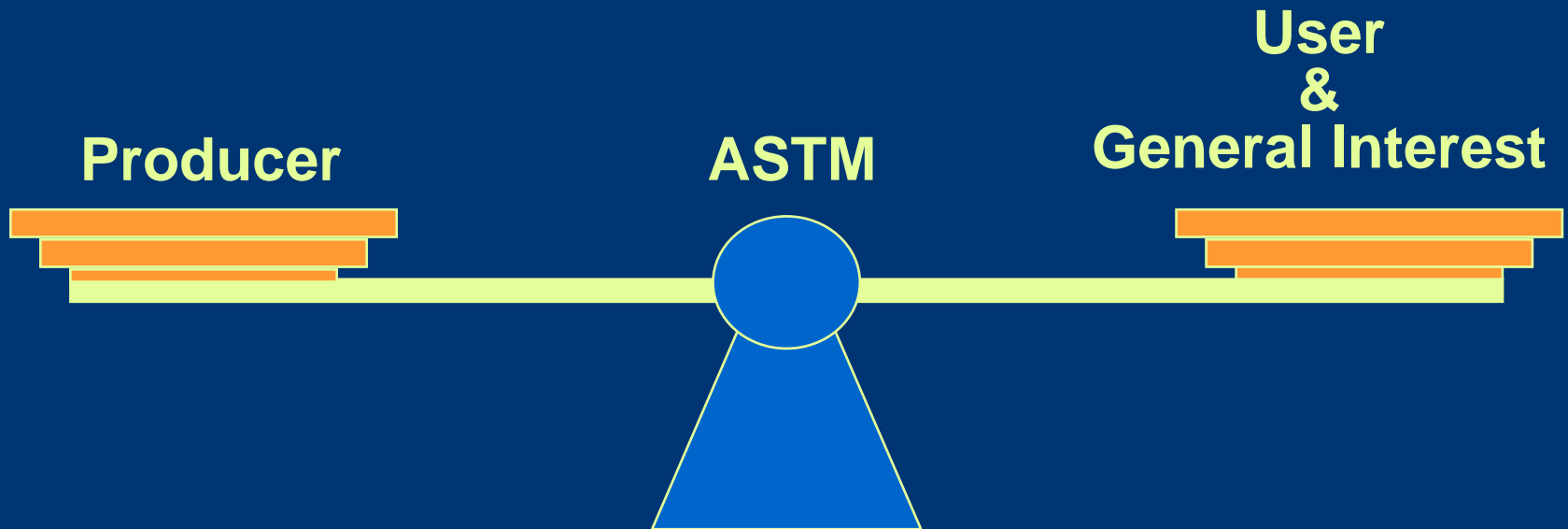
- Facilitates standards without borders
- Empowers private and public sector cooperation
- Enables implementation of Public Law 104-113 allowing the government to buy commercially available products
- Eliminates duplicative standards development, saving taxpayers millions of dollars

Open. Transparent. Relevant.

- Open process — all members have equal vote, equal voice
- Engenders public-private sector cooperation
- Process leads to widespread acceptance of ASTM International standards
- High quality standards, strong market relevance



Balance of Interest



*Technical Committees are balanced.
No excess influence by any interest group.*

Starting the Process

- Members identify the need; or
- Outside representatives approach ASTM
- ASTM brings stakeholders together
- ASTM provides the forum and the process



Committee Meetings

- Usually meet 2 times per year
- ASTM Committee Week Meetings
- Virtual Meetings





Committee F40 on Declarable Substances in Materials

Scope: Committee shall be the developer of standards for the evaluation of materials/products relative to RoHS (& similar) requirements. The Committee will encourage research in this field and sponsor symposia, workshops, and publications to facilitate the development of such standards. The Committee will promote liaison with other ASTM Committees and other organizations with mutual interests.



Committee F40 Overview

- Organized on January 13, 2005
- 150 members - 20 International Members – Bolivia, Canada, China, Germany, Japan, Korea Republic of (South), Mexico, Netherlands, Taiwan, Thailand, United Kingdom
- Over 123 entities represented – AHAM, NIST, GM, Cabot Corp, US EPA, OECD, TUV Rheinland, IBM, Motorola, NASA, Panalytical, SGS, Maytag, IFI, Bureau Vertias, IMA, Intertek, ACS, APC, DuPont, AIA, Thermo Electron Corp, TIA, Hasbro, UL, Whirlpool, Shimadzu, EIA, Honeywell, Sony, Boeing, BASF, Tyco, Toshiba, Perkin Elmer, AT&T, Fisher-Price, etc.





The F40 Approach

Bottom up

F40 will develop standards focused on testing of raw materials, not parts or finished goods

Benefits

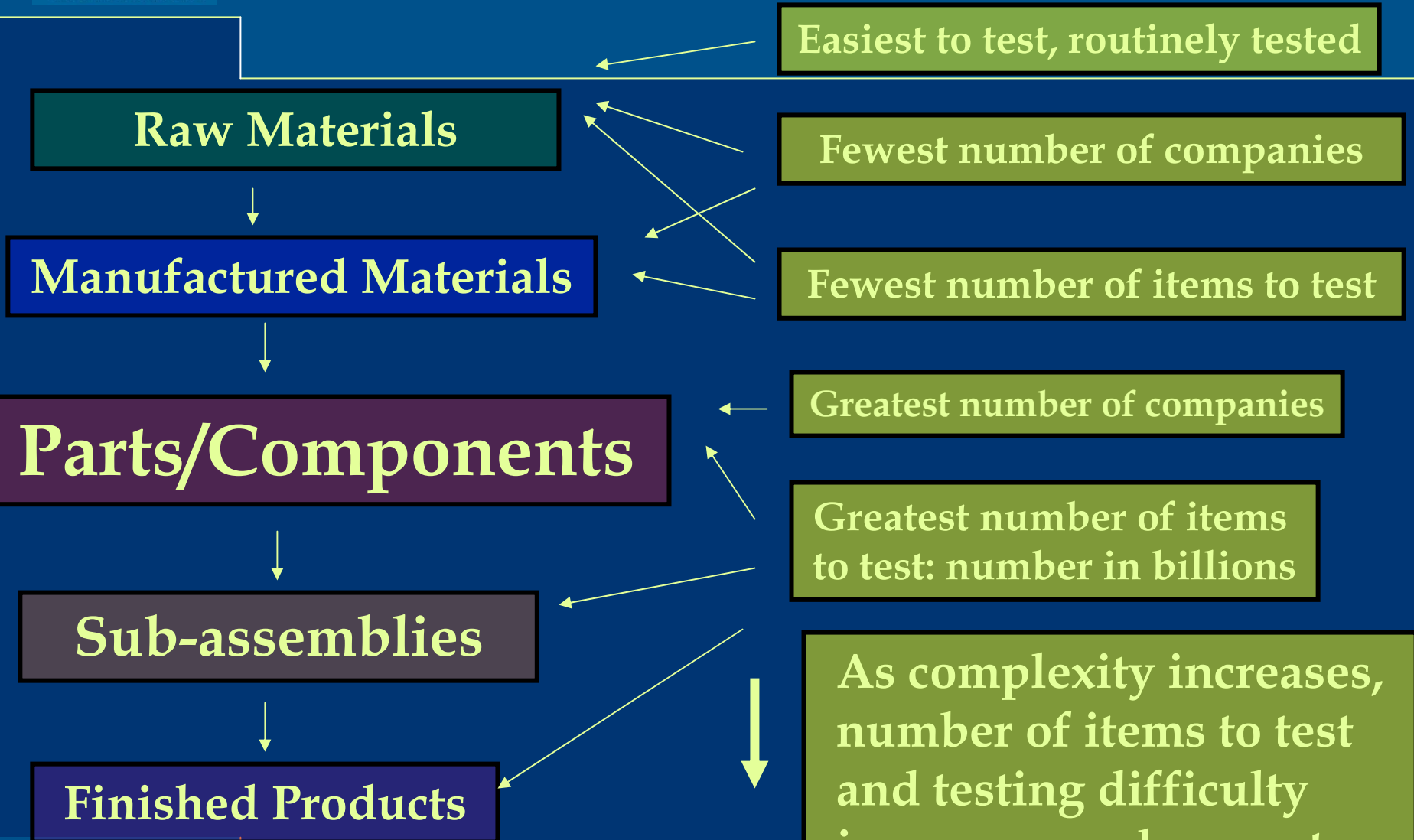
This will ultimately bring cost of compliance down, by allowing the entire supply chain to refer to the raw material purchase order to meet compliance – should make material declaration unnecessary.

Top down (IEC Method)

Focus is on grinding the final product to ID presence of substance and confirm/deny compliance. This can be costly (more products than materials = more tests = more expense to industry), and difficult to determine exact source of substance.



Supply Chain Model - Analysis





F40 Officers

- *Chairman:* Timothy J Mc Grady, LG Electronics USA Inc
e-mail: tmcgrady@lge.com
- *Vice Chairman:* Taco Van Der Maten, Panalytical
email: taco.van.der.maten@panalytical.com
- *Recording Secretary:* Anne W Kaplan, DuPont
e-mail: anne.w.kaplan@usa.dupont.com
- *Membership Secretary:* Stephen Emmons, Intertek
e-mail: stephen.emmons@intertek.com



F40 Subcommittees

F40.01 Test Methods

F40.02 Management Practices & Guides

F40.03 Monitoring and Research of Legislation and
Regulations

F40.90 Executive

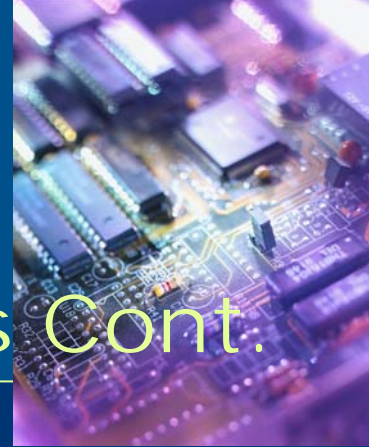
F40.91 Terminology

F40.01 Test Methods



Scope: This subcommittee's primary objective is the development of standard test methods related to declarable substances in materials and products to assist the manufacturing supply chains in various industries with compliance requirements. The subcommittee will communicate with internal (ASTM) and external technical committees to further the international acceptability of its efforts

- [WK9866](#) Standard Test Methods for Analysis of Tin-Based Solder Alloys and Pastes for Lead, Cadmium, Mercury, Antimony and Bismuth Using Inductively Coupled Plasma Atomic Emission Spectrometry
- [WK11200](#) Standard Test Method for Identification and Quantification of Lead, Mercury, Cadmium, Chromium, and Bromine in Polymeric Material using Energy Dispersive X-ray Spectrometry (EDXRF) – to be approved Jan 2008



F40.01 Test Methods Cont.

- [WK12294](#) Standard Test Method for Measuring polychlorinated biphenyl (PCB) contamination in recovered plastics
- WK8896 Standard Test Method for Determining Brominated Flame Retardants in Plastics (established under D20.70.02 Plastics, Analytical, Chromatography)
- [WK15289](#) Test Methods for Analysis of Heavy Metals in Glass Using X-Ray Fluorescence (XRF)
- [WK15434](#) Test Method for Analysis of Tin-based Solder Alloys Using Optical Emission Spectrometry
- Approved Work Item - XRF of Heavy Metals in Solder Alloys



F40.02 Management Practices & Guides

Scope: This subcommittee will establish standards for the management of information for the declaration via paper or electronic means of substances in materials. This will include standards for a declaration of conformance, the disclosure and transfer of test results, general material and substance disclosure and standard practices for the exchange of such information. Assist suppliers and purchasers in harmonizing requests and requirements throughout the supply chain.

- [F2577](#) Standard Guide for Assessment of Materials and Products for Declarable Substances
- [WK15430](#) Standard Guide for European Union's Registration, Evaluation, and Authorization of Chemicals (REACH) Supply Chain Information Exchange



F40.03 Monitoring of Legislation, Regulation and Existing Document Research/Liaison

Scope: Subcommittee F40.03 will monitor and report on; major government codes, regulations, standards, test methods and reference materials bearing on Declarable Substances in Materials. The subcommittee will be global in nature and scope. The subcommittee will compile and provide information for Standards Developing Organizations, suppliers and interested parties regarding various regulations and standards around the world. The subcommittee will communicate and liaise with other organizations as necessary.

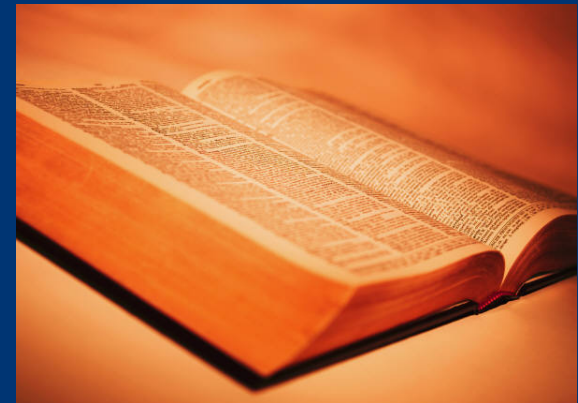
■ Enhesa Environmental Legislation & Regulation Database



F40.91 Terminology

Scope: Subcommittee F40.91 on Terminology is responsible for the overall management of the terminology of Committee F40 on Declarable Substances in Materials...

- **F2576** - Standard Terminology Relating to Declarable Substances in Materials





Questions?

Thank You



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