



BizNGO Guide to Safer Chemicals

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Our mission

To promote the creation and adoption of safer chemicals and sustainable materials in a way that supports market transitions to a healthy economy, healthy environment, and healthy people.

Our objectives include ...

- Model new type and degree of collaboration
- Develop tools and continuous improvement criteria
- Advance policy initiatives







BizNGO

FOR SAFER CHEMICALS AND SUSTAINABLE MATERIALS

Construction

Specialties

InterfaceFLOR

Building

Network

Perkins+Will

Healthy

• Shaw

• Dell, Inc.

- Electronics Take
 Back Coalition
 - Google
- Hewlett-Packard
- Seagate
- Breast Cancer Fund
- Clean Water Action
- Ecology Center
- EDF
- Env'l Health Strategy Center
- Investor Env'l Health Network
- NRDC

THE REAL

MethodNike

- Seventh Generation
- Staples
- Whole

Foods

Kaiser Permanente
Health Care Without Harm

Healthcare West

Hospira, Inc.

Catholic

- Practice Greenhealth
- Premier, Inc.

BizNGO Projects

Chemicals

- Principles for Safer Chemicals
- Guide to Safer Chemicals

Materials

- Principles for Sustainable Plastics
- Plastics Scorecard tool for integrating green chemistry into material assessments

<u>Policy</u>

- Gov't Initiatives TSCA, CA Green Chemistry
- Industry Standards GRI, Sustainability Consortium, ULE





BizNGO Principles for Safer Chemicals

(formerly the "Guiding Principles for Chemicals Policy")

Endorsers include ...

- Brooks Sports
- Catholic Healthcare West
- Construction Specialties, Inc.
- Health Care Without Harm
- Hewlett-Packard Company
- Hospira, Inc.
- Kaiser Permanente
- Method
- Novation
- Perkins+Will
- Practice Greenhealth
- Premier, Inc.
- Seventh Generation
- Staples, Inc.
- Whole Foods Market, Inc.

1. Know and disclose product chemistry

2. Assess and avoid hazards

3. Commit to continuous improvement

4. Support public policies and industry standards



BizNGO Guide to Safer Chemicals





BizNGO Guide to Safer Chemicals – Benchmarks **Principle #1a - Knowing Ingredients** Full Lifecycle Insights Summit **High Camp** Know all Require ingredients in **Base Camp** disclosure of products all chemicals Require Trailhead disclosure of high Know of limited upstream concern Ask suppliers number of process if they know chemicals chemistry chemicals in **Compliance** of high products, Know Know only concern but do not breakdown regulated require products substances disclosure



Highlights of Seagate's Product Stewardship System

Alignment to standards

- Seagate uses IPC 1752 as our materials reporting format
 - IPC 1752 is an open, industry data standard, not a Seagate-specific format

Full disclosure

- "FMD" (Full Materials Disclosure) is used to manage compliance to changing regulations and customer specifications
- Software automation is used to gather and manage data, grade compliance

Stability

- Supplier reporting requirements and formats seldom change

Security

 Seagate does use third party content collection services, but all data are maintained only in Seagate systems – and supplier data are kept confidential

Supplier responsibility

- Suppliers must provide full-disclosure data
- Suppliers are responsible for engaging third party (WSP) services

Resources required to react to new substance restrictions typically follow a 'sawtooth' line, and increase over time



Slide courtesy of Brian Martin, Seagate

By investing early in full disclosure data, Seagate has been able to flatten the 'sawtooth' in resource requirements



*CAS – Compliance Assurance System, Seagate's materials content compliance system

Slide courtesy of Brian Martin, Seagate





Disclosing Ingredients in Products

BOMcheck .net







maintains pH balance Dased dish liquids.

PEEL BACK THIS LABEL TO VIEW OUR FULL INGREDIENTS LIST

safety Information: Please keep all cleaning products out of the reach of





Our new standards for household cleaning products let you make the best choice for you.





wholefoodsmarket.com/eco-scale store info goes here



Full transparency, disclosure of ingredients on packaging by April 2012 Independent 3rd party verified compliance to standards No ingredients with significant environmental or safety concerns No formaldehydedonors, preservatives which have the potential to release formaldehyde No phosphates, chlorine, or synthetic and the second second

100% natural fragrances No ingredients with moderate environmental or safety concerns No DEA, MEA or TEA-surfactants that have the potential to contain nitrosamines and other impurities No synthetic, petroleum-derived thickeners made from nonrenewable sources

 Only 100% natural ingredients
 No petroleumderived ingredients

Health Product Declaration Form

Name & IDs	Tuff Stuff X42, product SKU SB4353	Mas		
Manufacturer	Ajax Manufacturing	Declar		
Description	Description High performance coating designed for painting bath stall walls and other wet surfaces.			

2) Product Contents Disclosure

Di	Disclosure level 94 percent of intentionally added content s fully disclosed (100 percent is ideal).					
Name		CAS RN	%	Health Hazard Warnings		
1	Phenyl Glycidyl Ether	122-60-1	55%	Cancer and Male reproductive toxicity (CA Prop 65) R37 Irritating to respiratory system and R53 May cause long-term adverse eff environment (EC Risk)		
2 Alkyl (C12, C14) Glycidyl Ether		68609-97-2	21%	Irritating to skin and May cause sensitization by skin contact. (EC Risk) Full Green Screen assessed at Benchmark 2 by ChemService on 6/6/2011. F www.ChemService.com/GS54345		
3	Bis(2-(dimethylamino)ethyl) ether	3033-62-3	8%	No warnings found		
4	Polyethylene	9002-88-4	7%	No warnings found		
5	Trade secret	Not	3%	Category 1 Evidence of endocrine disruption activity (EC Endocrine)		
		disclosed		Very toxic to aquatic organisms and possible risk of impaired fertility (EC Risk		
6	Acme Zap-It Antimicrobial	Content not	3%	Not available		
		disclosed				
7	Silver	7440-22-4	2%	No warnings found		
8	Distillate Fuel Oils, Light	13463-41-7	1%	No warnings found		
AI	I known residuals disclosed to	Lowest r	requirement	ts (ideal) X 100 ppm 1000 ppm As required on MSDS		
9	Formaldehyde	50-00-0	<1000	Group 1: Agent is carcinogenic to humans (IARC) and other cancer warnings		
			ppm	Generally accepted asthmagen (AOEC)		
				R23: Toxic by inhalation and R24: Toxic in contact with skin and R25: Toxic if		
				R34: Causes burns and R43: May cause sensitization by skin contact.(EC Ris		
	The manufacturer affirms that all known material contents were screened for chemicals of concern and health warning listings using: Building Network Building Network					

BizNGO Guide to Safer Chemicals – Benchmarks **Principle #2 - Assess & Avoid Hazards**

Safer Substitutes

Base Camp

Assess hazards of chemicals in products and process chemistry High Camp Benchmark chemicals using Green Screen

Summit

Select safer substitutes for both products and process chemistry



Compliance Avoid legally restricted substances

oliance I legally

y of high concern (e.g., SIN List)

Trailhead

Prioritize

chemicals

known

The SIN List a tool for identifying high concern chemicals





Greening Consumer Electronics

moving away from bromine and chlorine

SONY ERICSSON

Bromine- and Chlorine-Free Mobile Phones

APPLE

Restriction of Elemental Bromine and Chlorine to Achieve Elimination of BFRs and PVC in Consumer Electronics Products

DSM ENGINEERING PLASTICS

Bromine- and Chlorine-Free Plastic Components





- Comparative Chemical Hazard
 Assessment Method
- Publicly accessible and transparent
- Data driven, systematic and scientifically robust
- Builds from:
 - Life cycle thinking
 - 12 Principles of Green Chemistry
 - US EPA DfE Chemical Alternatives Assessment method









FOR SAFER CHEMICALS AND SUSTAINABLE MATERIALS

Benchmark 1

Avoid – Chemical of **High Concern**

GREEN SCREEN

HP is the world's leading practitioner of the <u>Green Screen tool.</u>

"HP has committed to replace restricted substances only with materials that are better for the environment and human health, and when there is sufficient assurance of required volumes and we have enough time to design and qualify the new material into the product. To assess alternative replacement materials we now use the Green Screen, a hazardbased assessment framework developed by the nongovernmental organization Clean Production Action."

HP's Global Citizens Report



BizNGO Guide to Safer Chemicals – Benchmarks **Principle #3 – Commit to Continuous Improvement** Leadership & Innovation Summit **High Camp** Integrate into Publicly **Base Camp** 3rd party report on verifiable Publicly progress Trailhead system and disclose towards job internal goals Establish descriptions & guidelines internal Baseline performance & set goals chemical Do not reviews policy report guidelines on progress







Comprehensive Chemicals Policy – Policy Statement

- CHW Supply Chain Management will:
- 1. Request product chemistry data from suppliers
- 2. Prioritize chemicals of high concern for elimination
- Create contractual obligations w/suppliers to:
 - a. Avoid chemicals of concern
 - b. Substitute safer alternatives
- 4. Develop goals and metrics to measure progress and evaluate results





BizNGO Guide to Safer Chemicals – Benchmarks **Principle #4 – Support Policies & Standards that Advance Principles #1 and #2**



FOR SAFER CHEMICALS AND SUSTAINABLE MATERIALS

Support Public Policies & Industry Standards

CONSTRUCTION SPECIALTIES PROMOTES TSCA REFORM AT HOUSE HEARING



BUSINESS LEADERS DISCUSS SAFER CHEMICALS POLICIES

November 30, 2010 In this 7 min. video three business leaders discuss how their companies are implementing the BizNGO Principles



Engaging and Informing Policy

- Business and NGO collaboration
- Academia collaboration
- Public forums
- Media
- Inform and engage government agencies
- Engage and inform public policymakers
- Inform and engage at the organizational level
- Supply chain collaboration

Trends in Chemicals Management

- Transparency disclose chemicals in products
- Responsibility -- Supply Chain and Life Cycle, including feedstocks
- A Demand for comprehensive hazard data on chemicals
- Demand for safer alternatives based on hazard assessment
- Leadership across many sectors, including: Health Care, Electronics, Buildings, Retail, Cleaning Products, Personal Care Products, Apparel & Footwear, Outdoor Industry





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