



The Joint Industry Guide (“JIG”): A Material Declaration Standard for the Global Electronics Industry

United Nations Environment Programme
Chemicals in Products (CiP) Project
December 17-18, 2009



History of the JIG

- January 2003 – International working group formed to develop material declaration standard
- April 2005 – JIG 101 published
 - Established list of reportable substances
- Sept 2007 – JIG 101A published
 - Addressed new regulatory and market requirements
- April 2009 – JIG 101 Ed 2.0 published
 - Addressed REACH issues and established annual update cycle
- April 2010 – JIG 101 Ed. 3.0 to be published
- April 2010 – New Draft JIG 201
 - Will include materials used in packaging and shipping of electronics



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Overview of the JIG

- Represents industry-wide and global (EU, Japan, US) consensus on materials/substances that are relevant for disclosure when present in electronics products
- Relevant substances are those that are subject to regulatory or market requirements
- Covers materials and substances that may be present in parts and components, including batteries
- Does not apply to:
 - Process chemicals (i.e., chemicals used and consumed during manufacture process) unless those chemicals constitute part of the finished product
 - Packaging/shipping materials (JIG 201 to cover this scope)



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Summary of Key Elements of JIG

- Changed from 2-criteria to 3-criteria rating system to better align with new draft IEC 62474 material declaration standard
 - Level A/Level B replaced by
 - Criteria 1 (regulated); Criteria 2 (for assessment); Criteria 3 (for information)
- Includes new REACH SVHC screening methodology to determine substances applicable to electronics products
 - supports REACH Article 33 communication and Art. 7.2 notification requirement
- Updated to include substances covered by global material content legislation
 - Global "RoHS" regulations (EU, China, Korea, etc); US CPSIA; US TSCA; Japan Law evaluating chemical substances; National Laws implementing Montreal Protocol
 - Global battery substance content declaration requirements
- Includes substances covered by internationally recognized industry standards or agreements
 - GS Mark, EPEAT, DIGITALEUROPE-EERA, Joint Position on WEEE
- Provides an annual JIG review/update process to ensure JIG continues to capture most up-to-date regulatory and industry reporting requirements



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JIG REACH SVHC Screening Process for Relevance to Electrotechnical Products

All REACH SVHCs

Only SVHCs which stay in final product

Only SVHCs in electronics products



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JIG REACH Screening Process (Cont)

- Uses publicly available database to conduct initial research on chemicals
 - ECHA, Kemi, INCHEM:PIM, Spin, JISHA, CERI, Kis-net, OSHA, EPA, NIST, CRC Handbook of Chemistry and Physics, etc
- Technical review by chemical experts in regional JIG Working Groups
- Final review by JIG Steering Committee



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Figure F-1 JIG REACH Screen Process Score Sheet

JIG REACH Screening Methodology for Relevance to Electrotechnical Products

No.	Candidate Name	CAS#	EC#	REACH SVHC	Candidate material in product	Application (Positive Factor for Electrotechnical Products)														Total
						Substance Name		Surface Finish (S, N, P, M, etc.)		Catalytic Activity		Additives		Fluxes		Solder		Other Additives		
						1	2	1	2	1	2	1	2	1	2	1	2			
1	Aluminum	7429904	183	1	1														2	
2	Aluminum Oxide	1344	183	1	1														2	
3	Aluminum Hydroxide	2164587	183	1	1														2	
4	Aluminum Chloride	7787464	183	1	1														2	
5	Aluminum Sulfate	2164587	183	1	1														2	
6	Aluminum Nitrate	2164587	183	1	1														2	
7	Aluminum Oxide	1344	183	1	1														2	
8	Aluminum Hydroxide	2164587	183	1	1														2	
9	Aluminum Chloride	7787464	183	1	1														2	
10	Aluminum Sulfate	2164587	183	1	1														2	
11	Aluminum Nitrate	2164587	183	1	1														2	
12	Aluminum Oxide	1344	183	1	1														2	
13	Aluminum Hydroxide	2164587	183	1	1														2	
14	Aluminum Chloride	7787464	183	1	1														2	
15	Aluminum Sulfate	2164587	183	1	1														2	
8 out of first 15 draft SVHCs were applicable to electronics industry																				
(Registry of Intentions)																				
1	Polyethylene	9002800	283	1	1														2	
2	Polypropylene	9003500	283	1	1														2	
3	Polyethylene Glycol	9003000	283	1	1														2	
4	Polyethylene Glycol	9003000	283	1	1														2	
5	Polyethylene Glycol	9003000	283	1	1														2	
1 registry of intention SVHC was applicable to electronics industry																				



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Summary of the JIG

- Industry-specific standard that balances supply chain need versus burdens of broader material declaration
- Facilitates reporting of material content information across the global electronics supply chain
- Incorporates the most updated regulatory requirements, including REACH SVHCs that are likely to be contained in electronics products
- Provides a regular review and revision cycle to update the JIG declarable substance list on an annual basis



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Global Support for the JIG



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Questions?

JIG Ed 2.0 available at www.ce.org/jig

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Japan Green Procurement Survey
Standardization Initiative

Association Connecting Electronics Industries

IPC

ITI
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