



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

“ICCM4 Lead Paint Alliance Side Event“

Voluntarily Stop Manufacture and Sale of Lead Paint
Challenges for small and medium-size paint manufacturers



INCLUSIVE AND SUSTAINABLE INDUSTRIAL DEVELOPMENT



UNIDO and the Global Alliance to Eliminate Lead Paint

- UNIDO joined the Lead Paint Alliance in 2014
 - (a) Promoting the establishment of appropriate national regulatory frameworks
 - (b) Promoting third-party certification/ public procurement guidance
 - (c) Identifying the information that small and medium-size paint manufactures may need to cost-effectively re-formulate their paint products



UNIDO's global projects to Eliminate Lead Paint

- GEF project *Eliminating Lead in Paint in Bolivia, Colombia, Ecuador and Peru* under development
- Global project on Innovative Approaches to Sound Management of Chemicals and Chemicals Waste

Lead in Paint in the Andean Region*- Facts

Market

- Production of paint varies between 24.000- 232.000 tons/ year
- Import of paint is common, export is small
- Paint is for architectural (approximately 73-85%) or industrial (15-27%) use;
- The market share of SME producer among all paint producers differ

Level of legislative framework and standards to regulate the level of lead differ among the region*.

* Region: Bolivia, Colombia, Ecuador and Peru

Analysis of trade flows and review of environmentally sound management practices related to products containing cadmium, lead and mercury in Latin America and the Caribbean

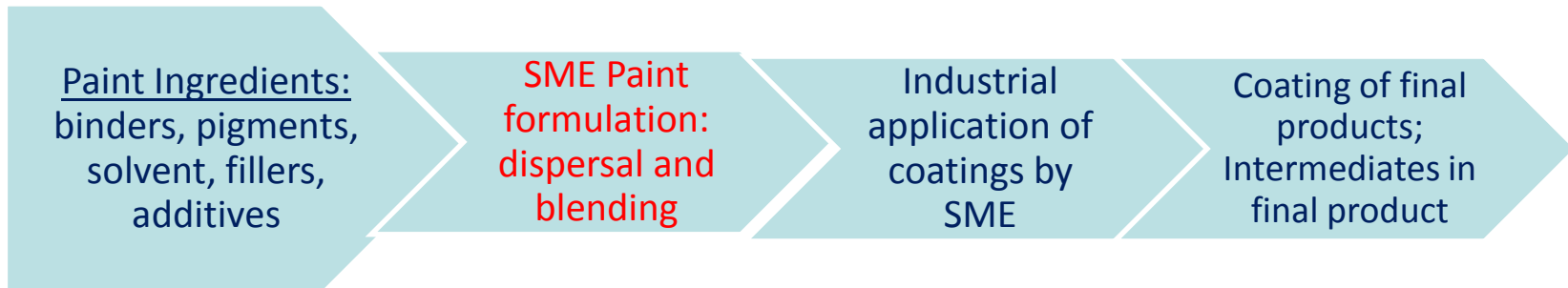
TRADE FLOW OF PRODUCTS CONTAINING LEAD TO AND FROM LATIN AMERICA AND THE CARIBBEAN (2001-2009 period)



Code	Description	MT	Importer country	Flow	MT	Supplier country	MT	Exporter country	Flow	MT	Buyer
HS02-8471	Automatic Data processing machines (computers)	595,996	Mexico	←	236,353	USA, Puerto Rico and USA Virgin Islands	1,069	Mexico	→	997	USA, Puerto Rico and USA Virgin Islands
		165,106	Brazil	←	103,180	China	51	Brazil	→	52	Argentina
		159,168	Argentina	←	69,145	China					
HS96-7801	Lead alloys and lead raw	655,963	Brazil	←	288,802	Peru	954	Peru	→	286	Brazil
		390,925	Mexico	←	301,876	USA, Puerto Rico and USA Virgin Islands	412	Mexico	→	209	USA, Puerto Rico and USA Virgin Islands
HS92-850710	Lead-acid batteries (vehicles)	184,171	Mexico	←	137,043	USA, Puerto Rico and USA Virgin Islands	1,495	Mexico	→	174	Brazil
		178,900	Argentina	←	168,023	Brazil	470	Brazil	→	174	USA, Puerto Rico and USA Virgin Islands
		115,400	Chile	←	36,535	Republic of Korea	186	Colombia	→	58	Venezuela
HS92-850720	Lead-acid batteries (except for vehicles)	224,672	Mexico	←	122,912	USA, Puerto Rico and USA Virgin Islands	307	Mexico	→	280	USA, Puerto Rico and USA Virgin Islands
		103,767	Brazil	←	65,787	China	30	Trinidad y Tobago	→	12	Ecuador
		65,008	Dominican Republic	←	43,157	USA, Puerto Rico and USA Virgin Islands					
HS96-260700	Lead ore and lead concentrates	374,819	Mexico	←	132,044	USA, Puerto Rico and USA Virgin Islands	3,092	Peru	→	1,633	China
							523	Bolivia	→	232	Republic of Korea

Role of small and medium-sized paint manufactures along the paint formulation value chain

Simplified paints & coatings value chain



Common characteristics of small and medium-sized paint manufactures along the paint formulation value chain

SME paint manufacturer	Direct customers	End market customer
<ul style="list-style-type: none">• 10-75 employees• Decorative and/or industrial coatings• Specialty ingredients (e.g. pigments) typically imported from Asia	<ul style="list-style-type: none">• Domestic SMEs painting contractors	<ul style="list-style-type: none">• Large original equipment manufacturers of finished goods.

Case studies of SMEs changing to lead free paints (a) Caralz in Colombia

Product lines:	Solvent-based paints for cars
Contains lead ?	Yes, yellow solvent-based paints
Has the company switched to lead-free paint?	Yes, lead-based pigment has been switched to lead-free
Additional plans to change to lead-free paints?	Yes, yellow solvent-based paint
Reasons for switching to lead-free paints?	<ul style="list-style-type: none">- High cost and environmental problems caused by lead-containing sludge- Customer demand lead-free paints
Challenges for switching to lead-free paints?	<ul style="list-style-type: none">- Market competitors not using lead-free paints- Lead-free paint is more expensive

Case studies of SMEs changing to lead free paints (b) Universal Colors in Peru

Product line	Paints and varnishes for architectural and industrial applications
Contains lead?	Yes, the water-based epoxy paints line
Has the company already switched to free-lead paints?	In progress
Reasons for switching to lead-free paints?	<u>High cost of hazardous waste disposal</u> : Fine for overpassing the Environmental Quality Standard <u>Proposal of Law to limit the Lead</u> in progress <u>Increased social awareness</u> about health effects
Challenges for switching to lead-free paints?	<ol style="list-style-type: none">1. Technical reformulating is time-consuming2. Prices for lead-free high3. Legislation not enforced



Summary of key challenges to SME manufactures to eliminate lead in paint

- Lack of regulations, enforcement (control) and incentives
- Supply of ingredients from larger paint manufactures – SMEs have no control
- Customer demand for lead-free paint is still low; customer are more price oriented
- R&D capacity of SMEs to develop and test lead-free paints are limited
- Economic challenges such as domestic unavailability of alternatives and need for costly import, low R&D capacity and potential price increases (for indoor and outdoor paints)



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THANK YOU!

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