



## Cameroon Lead Paint Data

In 2015, Centre de Recherche et d'Éducation pour le Développement (CREPD) purchased a total of 54 cans of solvent-based, enamel decorative, anti-corrosive and automotive paints from stores in Yaoundé and Douala, respectively, in the Centre and Littoral Regions of Cameroon.

- 29 locally manufactured (including the subsidiary of multinational paint manufacturers) paints, representing 8 brands (54% of the entire sample set)
- 25 imported paint samples from foreign countries in North Africa, European Union, South America and Middle East, representing 12 brands (46% of the entire sample set).

The paints were from 21 paint brands and brand holders among which 8 were local brands, 12 were imported brands and one brand where data on country origin could not be determined. Samples from all the paints were analyzed for their total lead content (dry weight) using the EPA 3050B/7420 method reference by the Forensic Analytical Laboratories, an accredited laboratory in the USA.

At the time this data was collected and analyzed Cameroon had no regulation limiting the manufacture, sale, import or use of paint with high lead content.

### ***Lead Levels in Paint***

- 19 of 35 decorative paints analyzed (54%) contained lead at levels above 90 parts per million (ppm, based on dry weight of the paint); samples from 18 paints out of those 19 had a lead content above 600 ppm; and samples from eight paints contained dangerously high lead levels at 10,000 ppm or above. Sixteen paints, representing 46% of the decorative paint samples, contained lead levels at 90 ppm or below.
- Eight samples from three of 12 anticorrosive paints (25%) contained more than 90 ppm lead; two of these three had lead content above 600 ppm. Eight of the 12 anticorrosive paints (67%) contained lead levels below 90 ppm; and one anticorrosive paint sample had a lead level of 90 ppm.
- Samples from five of seven automotive paints (71%) contained lead levels above 90 ppm and above 600 ppm as well; three samples of those five had lead levels above 10,000 ppm with a maximum of 85,000 ppm lead. Two automotive paints (29%) had lead levels below 90 ppm.

### ***Paint Brands***

- Samples from all three decorative paints from the largest local manufacturer (CEP/Seigneurie) contained less than 90 ppm lead.
- Three of eight (38%) samples from the second larger manufacturer (Smalto) contained less than 90 ppm lead,

- All four decorative paints from INODA's Rossignol (three enamel decorative paints) and Universal (one white enamel decorative) brands contained less than 90 ppm lead.
- Seven out of a total of nine samples (78%) of anticorrosive paints from the local manufacturers (CEP/Seigneurie, Smalto, Littocal, Forex and Camero-peint) meet the 90 ppm standard; while two out of a total of three imported paints (66%) meet the 90 ppm standard.
- Two out of a total of three automotive paint samples from the manufacturer CEP/Seigneurie had lead content below 90 ppm. In contrast, all four of the imported automotive paints (Colorado and Prodec from Morocco) had a lead content between 640 – 85,000 ppm.

#### ***National and Foreign Paint Producers***

- The percentage of paint samples with lead content less than 90 ppm among the major local paint producers were as follows: 100% for INODA, 86% for CEP/seigneurie, and 44% for Smalto.
- For the imported paint brands, 33% of National (UAE) samples were below 90 ppm; 0% of Continental (Algeria) samples were below 90 ppm; 0% of Prodec (Morocco) samples were below 90 ppm; 0% of Simpex (EU/EC) samples were below 90 ppm; and 100% of Nespoli (Italy) samples had lead content below 90 ppm.

#### ***Lead Levels by Color***

- Yellow paints had the highest content of lead. Four out of a total of eight yellow paints contained lead at levels above 10,000 ppm. The remaining four yellow paints contained low lead levels, below 90 ppm. The maximum concentration in a yellow paint was 85,000 ppm.
- Green paints also had high lead content. Four of eight green paints had high lead concentrations above 10,000 ppm. Two green paints contained lead below 90 ppm. The highest level detected in a green paint was 56,000.
- Seven of 12 red paints had lead concentrations above 600 ppm and two had levels at or above 10,000 ppm lead. The highest lead level detected in a red paint was 11,000 ppm.
- One of nine brownish (red brown, brown red, brown and red oxide) samples contained a lead concentration of 10,000 ppm, and all blue paints contained lead levels below 10,000. The maximum lead level detected in the group of paints with brownish color was 10,000 ppm and 9,800 in a blue paint.
- Lead levels for the white and grey paints ranged from below 60 ppm to 6,200 ppm.

#### ***Consumer Information***

- 83% of paint cans in this study have no labeling with regard to lead.
- The CEP/Seigneurie label clearly indicates that the paint is less than 90 ppm lead. With the exception of one automotive sample labeled "no lead" (which contained 45,000 ppm lead), all paints bearing this label by CEP/Seigneurie tested below 90 ppm.
- Two other brands (Continental, an imported brand by SARL Devco Co. Algeria and International Trust, manufactured in Lebanon and which carries the CE mark, indicating that it meets the standard of the European Union.), also included information about lead on their cans, but the paints themselves were lead paint with 2,100 and 2,600 ppm lead respectively.

The report was prepared by CREPD with support and assistance from the African Lead Paint Elimination Project, which was established to eliminate lead in paint and raise widespread awareness about the adverse human health impacts of lead-based paints, particularly on the health of children under six years old.

The Africa Lead Paint Elimination Project carries out focused activities to eliminate lead in paint in four project countries – Cameroon, Ethiopia, Ivory Coast, and Tanzania. The project is funded by the Global Environment Facility; the United Nations Environment Programme (UNEP) is the Project Implementing Agency; and IPEN is the Project Executing Agency. The contents of this booklet, however, are the sole responsibility of IPEN and Centre de Recherche et d'Education pour le Développement (CREPD).

CREPD is a Cameroon-based Health and Environmental NGO aiming to bridge the gap between science and action in sub Sahara Africa and beyond. Established in 2004, CREPD is a unique NGO within Cameroon with a technical scientific background and is a well respected resource for government ministries on chemicals management issues. The organization serves on a number of advisory committees and has an excellent working relationship with government, research institutions, and other stakeholders. CREPD also has a successful track record in obtaining multi-year funding from international funders and in executing projects as envisioned.

# CAMEROON LEAD PAINT DATA

TABLE 1. SOLVENT-BASED, ENAMEL DECORATIVE PAINTS PURCHASED AND ANALYZED FOR LEAD CONTENT IN CAMEROON

Sample Number	Brand Name	Color of Paint	Paint Can Size	Purchase Price Per Litre (USD)	Date Manufactured	Batch Number	Date of Purchase	Website on Label
CMR-100	CEP/Seigneurie	Yellow	100g	1,82			16-Feb-2015	
CMR-101	CEP/Seigneurie	Green	100g	1,85			24-Feb-2015	
CMR-102	CEP/Seigneurie	Blue	100g	1,85			24-Feb-2015	
CMR-103*	CEP/Seigneurie	Brown red	1kg	6,5	2614	00159	23-Feb-2015	
CMR-104**	CEP/Seigneurie	Yellow	1kg	14,5	3412	01264	24-Feb-2015	
CMR-105**	CEP/Seigneurie	Green	1kg	14,5	Exists but tiered	Exists but tiered	24-Feb-2015	
CMR-106**	CEP/Seigneurie	Blue	1kg	14	5114	01204	23-Feb-2015	
CMR-107	Smalto	Yellow	100g	2			16-Feb-2015	
CMR-108	Smalto	Green	100g	2			23-Feb-2015	
CMR-109	Smalto	Blue	100g	1,7			24-Feb-2015	
CMR-110	Smalto	Red	100g	2		10010053	23-Feb-2015	

Sample Number	Brand Name	Color of Paint	Paint Can Size	Purchase Price Per Litre (USD)	Date Manufactured	Batch Number	Date of Purchase	Website on Label
CMR-111*	Smalto	Red brown	1kg	5		14090488	23-Feb-2015	
CMR-112	Smalto	Brown	100g	2			24-Feb-2015	
CMR-113	Smalto	Blue	1kg	5,55			04-Mar-2015	
CMR-114	Smalto	Blue	1kg	3,95		07020122	04-Mar-2015	
CMR-115	Smalto	Green	1kg	4,45		Exists but cannot read	04-Mar-2015	
CMR-116	National paint	Green	1kg	6,6			16-Feb-2015	www.national-paints.com
CMR-117	National paint	Red	1kg	5,6			23-Feb-2015	www.national
CMR-118	National paint	Blue	1kg	6,6			23-Feb-2015	www.national
CMR-119*	Universal (INODA)	Red oxide	1kg	5	End of Shelf-life 14-Apr-2015	1404115-C-01	23-Feb-2015	
CMR-120*	Universal (INODA)	Black	1kg	5	End of Shelf-life 16-Jun-2015	140617-C-01	23-Feb-2015	
CMR-121	Universal (INODA)	White	1kg	6	End of Shelf-life 16-Nov-2015	141117-C-07	03-Mar-2015	
CMR-122*	Continental	Red	1kg	5		M030286BE	16-Feb-2015	

Sample Number	Brand Name	Color of Paint	Paint Can Size	Purchase Price Per Litre (USD)	Date Manufactured	Batch Number	Date of Purchase	Website on Label
CMR-123	Continental	Red	1kg	5		J020076B	23-Feb-2015	
CMR-124	Continental	White	1kg	5		V020083BE	03-Mar-2015	
CMR-125	Ros-signal (INODA)	Red	1kg	11	End of Shelf-life 21-Feb-2015	140222-C-03	23-Feb-2015	
CMR-126	Ros-signal (INODA)	White	1kg	10	End of Shelf-life 12-Feb-2015	140213-C-02	03-Mar-2015	
CMR-127	Ros-signal (INODA)	Black	1kg	10	End of Shelf-life 14-Feb-2015	140215-C-01	03-Mar-2015	
CMR-128*	SOCI-PEC	Red brown	1kg	5,6			23-Feb-2015	
CMR-129**	Prodec	Yellow	85g	1,3			24-Feb-2015	www.prodec.ma
CMR-130**	Colorado	Blue	85g	1,3			24-Feb-2015	www.prodec.ma
CMR-131**	Prodec	Green	85g	1,3			24-Feb-2015	www.prodec.ma
CMR-132**	Prodec	Red	85g	1,3			23-Feb-2015	www.prodec.ma

Sample Number	Brand Name	Color of Paint	Paint Can Size	Purchase Price Per Litre (USD)	Date Manufactured	Batch Number	Date of Purchase	Website on Label
CMR-133*	Camero-paint/SOQUI-CAM	Red brown	1kg	3,7			16-Feb-2015	
CMR-134	Simpex	Blue	1kg	4,8			24-Feb-2015	
CMR-135	Simpex	Green	1kg	4,8			24-Feb-2015	
CMR-136	Simpex	Red	1kg	4,8			24-Feb-2015	
CMR-137	Simpex	Grey	1kg	4,8			24-Feb-2015	
CMR-138*	Littocol	Brown	1kg	5			03-Mar-2015	
CMR-139*	Littocol	Black	1kg	5			03-Mar-2015	
CMR-140*	Ferox	Brown red	1kg	5			03-Mar-2015	
CMR-141	BASF SA. Sunvinil	yellow	1kg	6			03-Mar-2015	www.sunvinil.com.br
CMR-142	RITVER	Yellow	1kg	5		PS3005-230	03-Mar-2015	
CMR-143	RITVER	Brown	1kg	5		PS3001-752	03-Mar-2015	
CMR-144	Cap-color	Green	1kg	3,3	09-Oct-2012	X1228005	03-Mar-2015	www.peintures
CMR-145	Cap-color	Yellow	1kg	3,3	29-Sep-2012	X1227405	03-Mar-2015	www.peintures

Sample Number	Brand Name	Color of Paint	Paint Can Size	Purchase Price Per Litre (USD)	Date Manufactured	Batch Number	Date of Purchase	Website on Label
CMR-146	International trust	Red brown	1kg	5			04-Mar-2015	
CMR-147	Pelican	Red	100 g	1,8			04-Mar-2015	
CMR-148	Pelican	Blue	100g	1,8			04-Mar-2015	
CMR-149*	Force one	Red	1kg	5	06-May-2013		04-Mar-2015	
CMR-150*	Xylazel	Red	750 ml	18		XZ13400201	04-Mar-2015	www.xylazel.com
CMR-151	Nespoli	Red	400 ml	8,428		180010	11-Mar-2015	
CMR-152	Nespoli	Yellow	400 ml	8,428		180013	11-Mar-2015	
CMR-153	Nespoli	Blue	400 ml	7,882		180019	11-Mar-2015	

\* *Anticorrosive paint samples*

\*\* *Automotive paint samples*



**TABLE 2: RESULTS OF LEAD ANALYSIS FOR SOLVENT-BASED ENAMEL DECORATIVE PAINTS PURCHASED IN CAMEROON**

<b>Sample Number</b>	<b>Brand Name</b>	<b>Color of Paint</b>	<b>Lead Content of Paint (ppm)</b>	<b>Country of Brand Headquarters</b>	<b>Country Where Manufactured</b>	<b>Is there information on can about lead content of paint?</b>
CMR-100	CEP/Seigneurie	Yellow	< 60	USA	Cameroon	Yes Lead concentration less than 90 ppm
CMR-101	CEP/Seigneurie	Green	< 60	USA	Cameroon	Yes Lead concentration less than 90 ppm
CMR-102	CEP/Seigneurie	Blue	< 60	USA	Cameroon	Yes Lead concentration less than 90 ppm
CMR-103*	CEP/Seigneurie	Brown red	< 60	USA	Cameroon	Yes Lead concentration less than 90 ppm
CMR-104**	CEP/Seigneurie	Yellow	45000	USA	Cameroon	Yes Lead concentration less than 90 ppm
CMR-105**	CEP/Seigneurie	Green	< 60	USA	Cameroon	Yes Lead concentration less than 90 ppm
CMR-106**	CEP/Seigneurie	Blue	< 60	USA	Cameroon	Yes Lead concentration less than 90 ppm
CMR-107	Smalto	Yellow	70000	Cameroon	Cameroon	No
CMR-108	Smalto	Green	8500	Cameroon	Cameroon	No
CMR-109	Smalto	Blue	< 60	Cameroon	Cameroon	No

<b>Sample Number</b>	<b>Brand Name</b>	<b>Color of Paint</b>	<b>Lead Content of Paint (ppm)</b>	<b>Country of Brand Headquarters</b>	<b>Country Where Manufactured</b>	<b>Is there information on can about lead content of paint?</b>
CMR-110	Smalto	Red	< 60	Cameroon	Cameroon	No
CMR-111*	Smalto	Red brown	< 60	Cameroon	Cameroon	No
CMR-112	Smalto	Brown	< 60	Cameroon	Cameroon	No
CMR-113	Smalto	Blue	2700	Cameroon	Cameroon	No
CMR-114	Smalto	Blue	350	Cameroon	Cameroon	No
CMR-115	Smalto	Green	56000	Cameroon	Cameroon	No
CMR-116	National paint	Green	18000	UAE	UAE	No
CMR-117	National paint	Red	11000	UAE	UAE	No
CMR-118	National paint	Blue	< 60	UAE	UAE	No
CMR-119*	Universal (INODA)	Red oxide	< 80		Cameroon	No
CMR-120*	Universal (INODA)	Black	<60		Cameroon	No
CMR-121	Universal (INODA)	White	< 60		Cameroon	No
CMR-122*	Continental	Red	2100		Imported by SARL Devco Co. Algeria	Yes Exempted from lead
CMR-123	Continental	Red	6900		Imported by SARL Devco Co. Algeria	No
CMR-124	Continental	White	6200		Imported by SARL Devco Co. Algeria	No
CMR-125	Rossignol (INODA)	Red	< 60		Cameroon	No
CMR-126	Rossignol (INODA)	White	< 60		Cameroon	No

Sample Number	Brand Name	Color of Paint	Lead Content of Paint (ppm)	Country of Brand Headquarters	Country Where Manufactured	Is there information on can about lead content of paint?
CMR-127	Rossignol (INODA)	Black	< 60		Cameroon	No
CMR-128*	SOCIPEC	Red brown	< 60		Cameroon	No
CMR-129**	Prodec	Yellow	85000		Morocco	No
CMR-130**	Colorado	Blue	640		Morocco	No
CMR-131**	Prodec	Green	15000		Morocco	No
CMR-132**	Prodec	Red	9800		Morocco	No
CMR-133*	Camero-peint/ SOQUICAM	Red brown	540	Cameroon	Cameroon	No
CMR-134	Simpex	Blue	1500	EU	EU	No
CMR-135	Simpex	Green	27000	EU	EU	No
CMR-136	Simpex	Red	10000	EU	EU	No
CMR-137	Simpex	Grey	2300	EEC	EEC	No
CMR-138*	Littocol	Brown	< 60	Cameroon	Cameroon	No
CMR-139*	Littocol	Black	< 60	Cameroon	Cameroon	No
CMR-140*	Ferox	Brown red	710		Cameroon	No
CMR-141	BASF SA. Sunvinil	yellow	< 60	Brazil	Brasilia	No
CMR-142	RITVER	Yellow	60000	Italy	UAE	No
CMR-143	RITVER	Brown	10000	Italy	UAE	No
CMR-144	Capcolor	Green	5900		Tunisia	No
CMR-145	Capcolor	Yellow	80		Tunisia	No
CMR-146	International trust	Red	2600		CE	Yes Lead Free paint
CMR-147	Pelican	Red	4800	Cameroon	Cameroon	No
CMR-148	Pelican	Blue	2800	Cameroon	Cameroon	No
CMR-149*	Force one	Red	90	France	France	No

<b>Sample Number</b>	<b>Brand Name</b>	<b>Color of Paint</b>	<b>Lead Content of Paint (ppm)</b>	<b>Country of Brand Headquarters</b>	<b>Country Where Manufactured</b>	<b>Is there information on can about lead content of paint?</b>
CMR-150*	Xylazel	Red	< 60		Spain	No
CMR-151	Nespoli	Red	< 60		Italy	No
CMR-152	Nespoli	Yellow	< 60		Italy	No
CMR-153	Nespoli	Blue	< 60		Italy	No

\* *Anticorrosive paint samples*

\*\* *Automotive paint samples*

**TABLE 3. DISTRIBUTION OF LEAD CONCENTRATION BY BRAND OF SOLVENT-BASED, ENAMEL DECORATIVE PAINTS PURCHASED IN CAMEROON**

<b>Brand</b>	<b>Number of Paints</b>	<b>Average Lead Concentration (ppm)</b>	<b>Number of Paints &gt;90 ppm Lead</b>	<b>Number of Paints &gt;600 ppm Lead</b>	<b>Number of Paints &gt;10,000 ppm Lead</b>	<b>Minimum Lead Concentration (ppm)</b>	<b>Maximum Lead Concentration (ppm)</b>
CEP/Seigneurie	3 (decorative)	<60 ppm	0	0	0		<60 ppm
CEP/Seigneurie	1 (anticorrosive)	<60 ppm	0	0	0		<60 ppm
CEP/Seigneurie	3 (automotive)	45,000	1	1	1		45,000
Smalto	8 (decorative)	27,510	5	4	2	350	70,000
Smalto	1 (anticorrosive)	<60 ppm	0	0	0		<60 ppm
INODA	4 (decorative)	<60 ppm	0	0	0		<60 ppm
INODA	2 (anticorrosive)	<60 ppm	0	0	0		<60 ppm
National paint	3 (decorative)	14,500	2	2	2	11,000	18,000
Continental	2 (decorative)	6,550	2	2	0	6,200	6,900
Continental	1(anticorrosive)	2,100	1	1	0		2,100
Colorado	4 (automotive)	27,610	4	4	2	640	85,000
Camero-peint/ SOQUICAM	1 (anticorrosive)	540	1	0	0		540
Simpex	4 (decorative)	10,200	4	4	1	1,500	27,000
Ferox	1 (anticorrosive)	710	1	1	0		710
RITVER	2 (decorative)	35,000	2	2	1	10,000	60,000
Capcolor	2 (decorative)	5,900	1	1	0		5,900
International trust	1 (decorative)	2,600	1	1	0		2,600
Pelican	2 (decorative)	3,800	2	2	0	2,800	4,800
Force one	1 (anticorrosive)	90	0	0	0		90

<b>Brand</b>	<b>Number of Paints</b>	<b>Average Lead Concentration (ppm)</b>	<b>Number of Paints &gt;90 ppm Lead</b>	<b>Number of Paints &gt;600 ppm Lead</b>	<b>Number of Paints &gt;10,000 ppm Lead</b>	<b>Minimum Lead Concentration (ppm)</b>	<b>Maximum Lead Concentration (ppm)</b>
LITTOCOL	2 (anticorrosive)	<60 ppm	0	0	0		< 60 ppm
BASF SA. Sun-vinil	1 (decorative)	<60 ppm	0	0	0		<60 ppm
Xylazel	1 (anticorrosive)	<60 ppm	0	0	0		<60 ppm
Nespoli	3 (decorative)	<60 ppm	0	0	0		<60 ppm

**TABLE 4. LEAD CONCENTRATION BY COLOR OF SOLVENT-BASED, ENAMEL DECORATIVE PAINTS PURCHASED IN CAMEROON**

<b>Color</b>	<b>Number of Samples</b>	<b>Average Lead Concentration (ppm)</b>	<b>Number of Samples &gt;90 ppm Lead</b>	<b>Number of Samples &gt;600 ppm Lead</b>	<b>Number of Samples &gt;10,000 ppm Lead</b>	<b>Minimum Lead Concentration (ppm)</b>	<b>Maximum Lead Concentration (ppm)</b>
Yellow	3 (decorative)	43,400	2	2	2	80	70,000
	2 (automotive)	65,000	2	2	2	45,000	85,000
Green	8 (decorative)	21,700	6	6	4	5,900	56,000
Blue	8 (decorative)	1,837	4	3	0	350	2,800
	2 (automotive)	640	1	1	0		640
Red	7 (decorative)	8,200	4	4	1	4,800	11,000
	3 (anticorrosive)	1,100	2	1	0	90	2,100
	1 (automotive)	9,800	1	1	0		9,800
Brown*	3 (decorative)	3,600	2	2	1	2,600	10,000
	6 (anticorrosive)	443	2	1	0	80	710
White	3 (decorative)	6,200	1	1	0		6,200
Grey	1 (decorative)	2,300	1	1	0		2,300

\* Includes brownish colors, e.g., red brown, brown red, or red oxide.