

PROJECT SUMMARY

Ref No.: CRIGS- **PROPOSAL TITLE:**

A22 Greener Paints for a Smarter Mauritius

Priority Area: Manufacturing

NAME OF LOCAL COMPANY: Eurolux Co. Ltd

Company Director:Mr N K Domah

Collaborating Institution:University of Mauritius

Head of Collaborating Institution: Prof R Mohee

PROJECT LEADER

Name: Mr Mukesh KEERODHUR Company: Eurolux Co. Ltd

RESEARCH COLLABORATOR(S)

| Name | Organisation |
|----------------------------|-------------------------|
| Dr Sabina JHAUMEER-LAULLOO | University of Mauritius |
| Dr Henri LI KAM WAH | University of Mauritius |

TECHNICAL ABSTRACT

Some of the most harmful chemicals found in paints are the volatile organic compounds (VOCs). When they enter the air, they react with other elements to produce ozone, which causes air pollution and various health issues including breathing problems, headache, burning, watery eyes and nausea. Some VOCs have also been linked to cancer, kidney and liver damage. It is noteworthy that most decorative and road marking paints currently used on the island are oil-based and hence have particularly high VOC levels.

Eurolux Co. Ltd will focus on developing greener paints, containing no or very low VOC levels. The proposed decorative and road marking paintswould be water-borne and will be less prone to bad odour and fire hazards. They will also exhibit much lower toxic effect on inhalation or on contact with skin. Non-toxic and non-fire hazards materials will be used as pigment and filler, water-based acrylic emulsion as binder and water as thinner in addition to minor additives for dispersion and preservation.

The research work will involve determining the optimum formulation for the paints to be used locally and in other tropical regions and analysis of critical parameters such as hiding power, scrubability, VOC, heavy metal, etc.

Key Words:

Green paints, VOC, road-marking, decorative, heavy metals, water-borne, ecopaints