



A Company Committed to Innovation

Ferrara, 19th September 2018



Nodari Nereo
Site Manager

Content

A rack of laboratory glassware, including graduated cylinders and pipettes, is shown in a laboratory setting. The glassware is arranged in a white rack, and the background is a blurred laboratory environment with various pieces of equipment and glassware.

- Value creation
- Complete solution
- Strategic Partnership
- International Presence
- Certifications
- Facts & Figures
- India strategy
- PBO process innovation
- Sustainable Site Management
- Zinc Recovery
- Summary



Value Creation

Established in 1980, Endura S.p.A is a global chemical company based in Italy, a world market leader in the business of active ingredients and synergists for insect control products.

Safeguarding the well-being of human health and that of our environment is our mission principle and where we create value. We defend public health of communities worldwide with safe products manufactured by innovative eco-friendly process.

Our tailor-made solutions enhance the efficacy of insect control products destined for various markets, covering household, professional, veterinary, pharmaceutical and vector control applications.

Complete Solutions

Insect Control

Knock Down & Killing Actives:
Tetramethrin, d-Allethrin, Prallethrin, Transfluthrin,
Natural Pyrethrum and others

High efficacy. Safe for human. Non-Toxic

Bite Prevention

Saltidin® *, highly-efficient active ingredient
in insect repellent

Long lasting effect. Safe. Easy to Formulate

*Saltidin® is a registered trademark of Saltigo. Endura is the exclusive distributor in
Italy, Spain and LatAm and Asia

Resistance Control

Piperonyl Butoxide (PBO)

Powerful synergist prolonging insecticide efficacy

Overcoming insect resistance against insecticide
and enhancing formulation performance

Manufactured with innovative eco-friendly process



Strategic Partnerships

In order to deliver high-quality products and effective insect control solutions, Endura has long-term production and distribution agreements with world-class suppliers in Germany, Rwanda and China.

Germany

- Bayer AG -
Distribution and development of
Transfluthrin & Cyfluthrin
- Saltigo GmbH -
Distribution and promotion of
Saltidin®

Rwanda

- Horizon Sopyrwa Ltd. -
Production and processing of
Pyrethrum, a natural botanical
insecticide extracted from
chrysanthemum flower.

China

- Jiangsu Yangnong Co. Ltd. -
Production of Pyrethroids,
among others.

International Presence



Certifications

Quality issues are a top priority in every phase of production and in every working area.

In Ravenna, Endura is certified under Quality and Environmental Systems with:

- ISO 9001: 2015
- ISO 14001: 2015
- OHSAS 18001: 2008
- ISO 50001: 2010
- Responsible Care

In Kolkata, our facility is certified with ISO 9001: 2015



UNI EN ISO **9001:2015**



SISTEMA DI GESTIONE
QUALITÀ CERTIFICATO

UNI EN ISO **14001:2015**



SISTEMA DI GESTIONE
AMBIENTALE CERTIFICATO



Responsible Care[®]
OUR COMMITMENT TO SUSTAINABILITY



Facts & Figures

| | |
|----------------------------|----------------------------------------------------------------|
| Company Established | 1980 |
| Number of Employee | 120 worldwide |
| Number of Production Sites | 3 world wide (Italy, India & China through partnership) |
| Revenue | €41 Million in 2017 |
| Distributors & Agents | 35 worldwide |
| Sales Network | 65 countries |
| Patents owned | 28 |
| Patents in development | 3 |
| Customer satisfaction | 97% in 2016 |

India Strategy

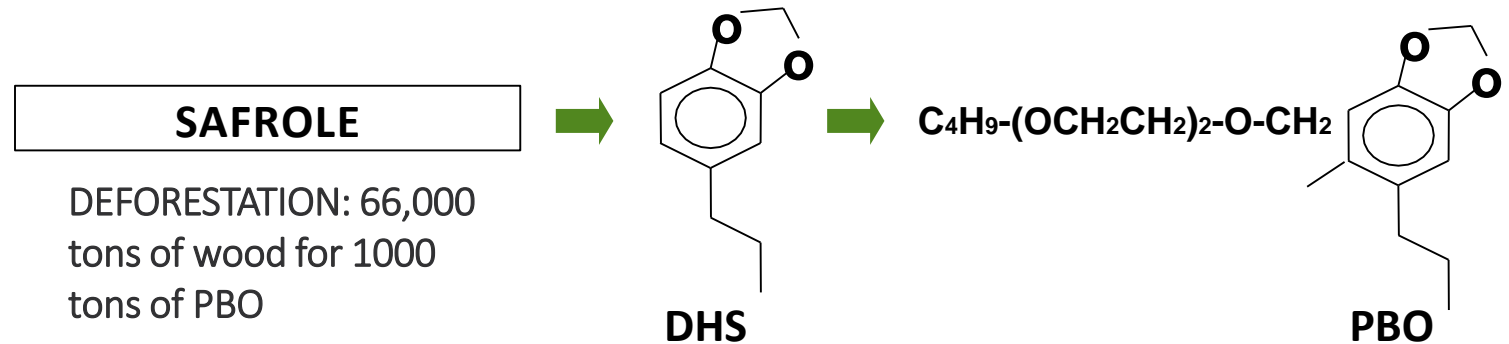


PBO Process Innovation

Endura's spirit of sustainable development is best manifested in the patented synthesis process of PBO.

Traditional Route

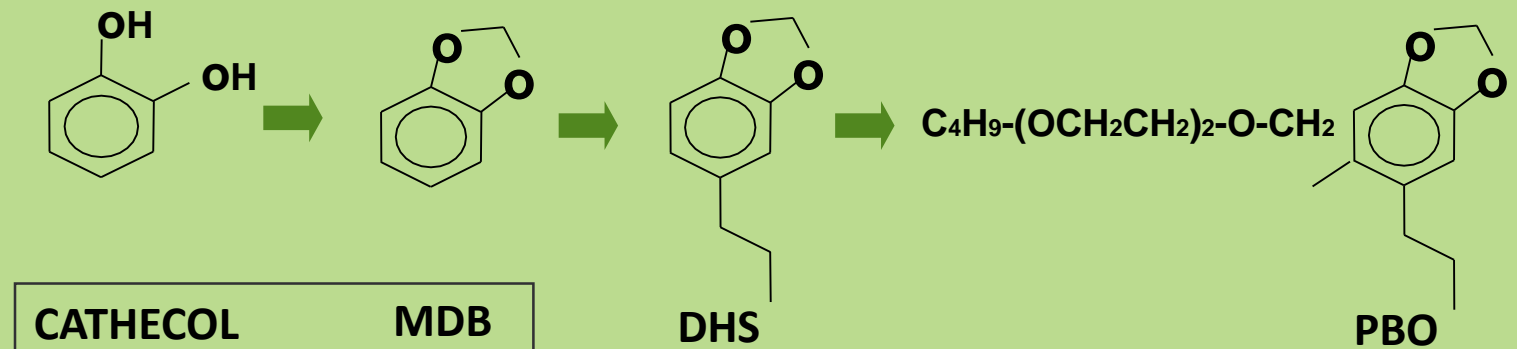
Safrole was a key ingredient in the manufacture of PBO. Extracting safrole from sassafras tree oil meant cutting down 500,000 trees annually, an equivalent of 100 football fields of forest.



Endura's Innovation

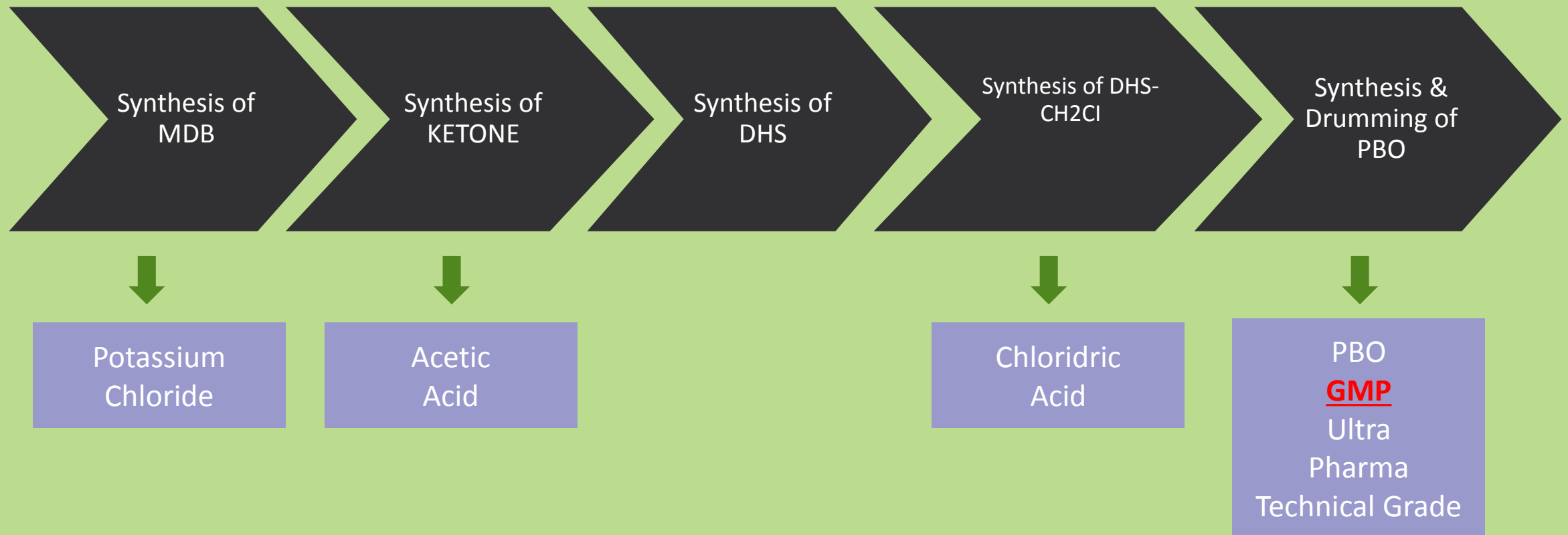
Endura created an eco-friendly synthesis process to produce PBO from catechol.

No more deforestation is needed.



NO MORE DEFORESTATION, NO DRUG PRECURSOR

PBO Process Innovation



Sustainable Site Management

Endura chose to base the production facility in Ravenna Chemical District exactly because it can work directly with top environmental protection service providers in the Park. In this way, Endura can concentrate on the core R&D and processes while the facility is managed in a sustainable way.

Herambiente – Waste water treatment
Relief vent combustor

EniPower – Electric power and Steam

RSI – Fire brigade, First aid & Water distribution

Rivoira – Nitrogen, hydrogen and air



Sustainable Site Management

Endura is working with the other companies located into the chemical district on projects of environmental sustainability:

- Combustor for the relief vents disposal
- Waste water treatment
- Water table monitoring network
- Air quality monitoring network

More importantly, the whole chemical district plans to implement **“EMAS”** – Eco-Management Audit Scheme – and within end of this year to have the environment certification

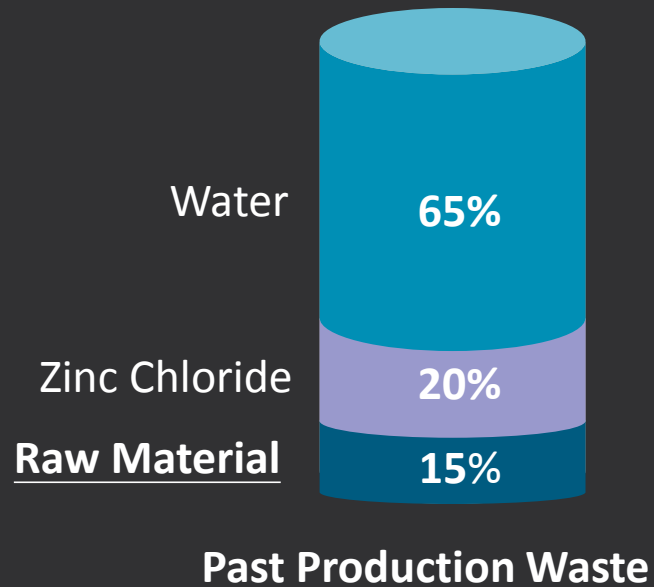


Zinc Recovery Innovation

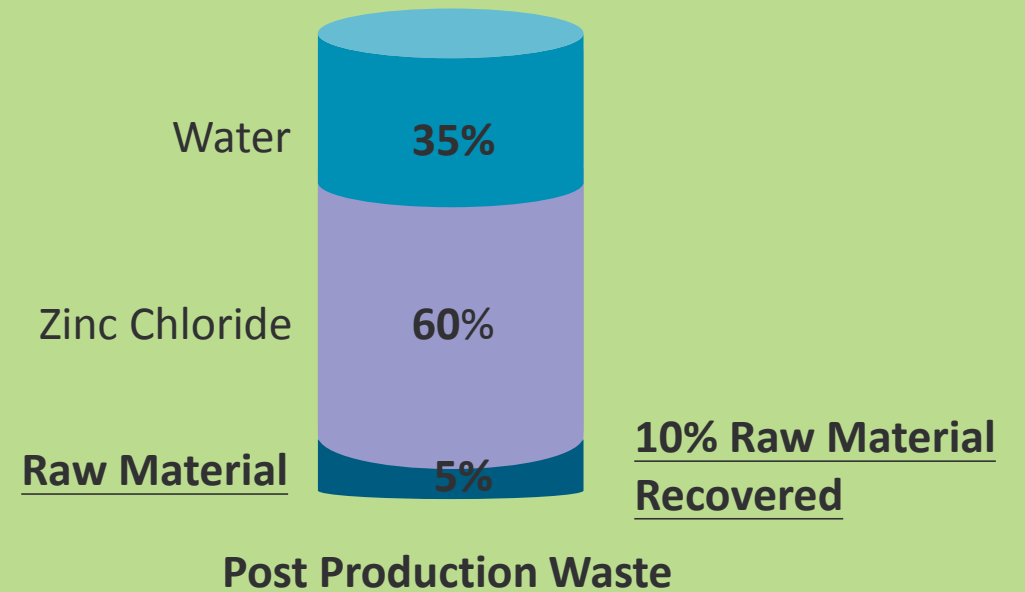
Endura innovated the manufacturing process with sustainable principle and achieved 3 key results: Raw Material Recovery, New Stream brought by waste re-composition, and Waste Reduction.

Raw Material Recovery

BEFORE



AFTER

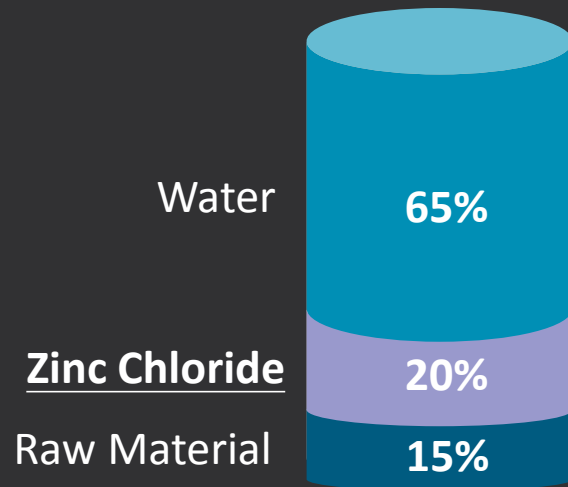


Zinc Recovery Innovation

The new process also changed the waste composition as zinc chloride was increased. It became a raw material for galvanizing industry, such as the consortium Sanimet. The reutilization of this material greatly reduced the amount of waste.

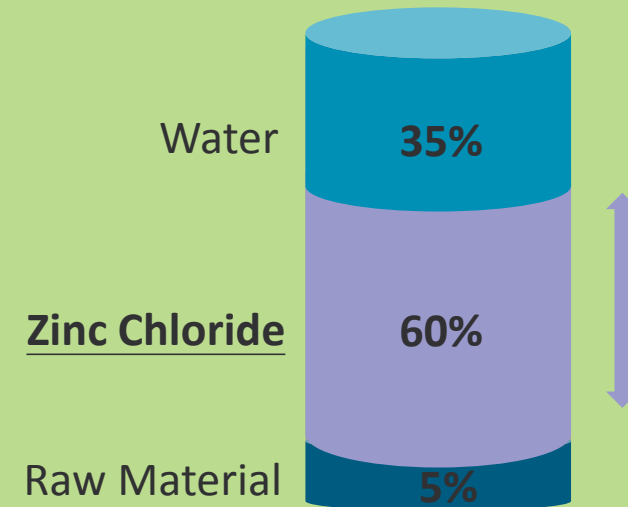
Waste Re-composition & Reutilization

BEFORE



Past Production Waste

AFTER



Post Production Waste

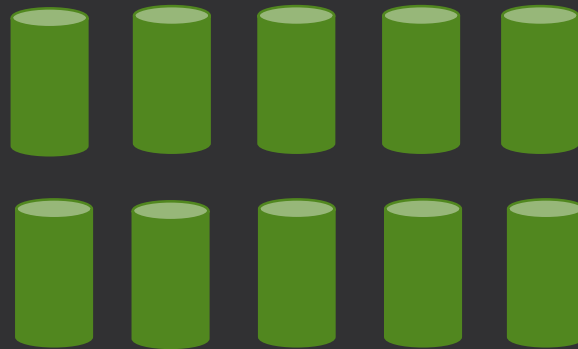
Zinc Recovery Innovation

After the innovative process modification, the waste quantity was reduced by 66%.
The cost of waste management was reduced even further by 90%.

Waste Reduction

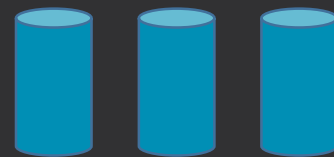
BEFORE

Finished Products



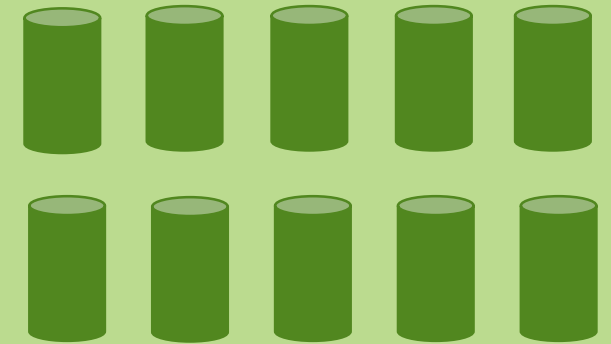
VS.

Waste



AFTER

Finished Products



VS.

Waste



Summary

Sustainable Development has been the guideline followed by the company since the beginning of his recent history.

Innovation on the PBO process, the decision of producing PBO into one of the most important chemical district in Italy and creation of production site in India are clear choices taken by Endura on Sustainable Development

Recently, the environment impact of our processes was reduced by giving our waste streams to third party companies for their reutilization





Thank You.