

HYDROCEROL CASE STUDY

HYDROCEROL - Additive Master batches, Manufactured by CLARIANT.

CONTEXT:

Reduce polymer consumption by introducing Foaming Agent Method. CLARIANT offers HYDROCEROL range of ready to use chemical foaming available in Master Batch form. Foaming agent is mixed with polymer granule, it decomposes form of gas and produce air bubble like structure between two solid polymer layers.

STRATEGIES DESCRIBED:

- a) By using CFA (HYDROCEROL 2056) – Reduction in weight of I/M Pai I Container/ final article.
- b) Reduce polymer consumption by using CFA – HYDROCEROL 2056
- c) Reducing density and weight and increasing thermal and acoustic insulation.



CHALLENGES

- a) Have to reduce around 6-7 % weight reduction of final article without changing its aesthetics.
- b) Shut off Nozzle helps in achieving maximum efficiency of weight reduction and it recommended.
- c) Conducted trial in Pail container with Hydrocerol 2056 @ lesser dosage level (around 0.5 %) (Foaming Agent) with adjustment in processing parameters

OUTCOMES:

- a) We have succeeded to reduce the weight of the pail container by 6-7 %.
- b) There is no change in aesthetics of controlled sample and sample with CFA .(Hydrocerol-2056)
- c) Sample with Hydrocerol has passed all test like Breaking load, Flexural strength ,top load, stacking ,filling trial at plant ,transit trial ,drop test ,stability study.
- d) Award winning product.



BENEFITS:

- a) Reduces carbon footprint.
- b) Generates enormous savings.