



2022 ARCHROMA SUSTAINABILITY AWARDS

Application Form

3. Title of the application: (for ease of reference by the Jury and voters)

- New Carta Orange RTG liq with environmental protection and lower cost

4. Award category

- Business Win
- Diversity & inclusion
- Environment
- Excellence



- Innovation
- Safety First
- Sustainable partnership

5. Elevator pitch

- This project is the synthesis process of new Carta Orange RTG liq. The process uses an organic base for reaction. The reaction process is stable and controllable, and the final product is stable. This process has successfully produced 310 tons of finished products in Tianjin.

6. Describe how your project and its impact help achieving the category-specific criteria

- Due to the rising price of lithium hydroxide, the cost of the original process is too high to carry out effective production. The use of conventional liquid alkali will lead to precipitation of the final product. Carta Orange RTG liq orders of 1000-1200 tons per year will be lost. This process uses organic alkali instead of lithium hydroxide for reaction, which can greatly reduce the process cost, and the product performance after replacement can fully match the demand. And the stability of the final product is excellent. The process is stable in large-scale production. At present, Tianjin factory has produced 310 tons of Carta Orange RTG liq products according to this process and has successfully sold them. The R & D of this process ensures an annual order of 1000-1200 tons, which brings a lot of profits to the company.

7. Describe how your project supports “The Archroma Way to a Sustainable World: Safe, efficient, enhanced, it’s our nature”

- The old process uses lithium hydroxide for reaction, but the heat release of lithium hydroxide in the reaction process is very intense, which is very easy to exceed the reaction temperature and even produce boiling. In the production process, a large amount of ice is required to cool down, resulting in a waste of energy. The process of replacing lithium hydroxide with organic base has moderate reaction temperature and stable exothermic reaction process. The self-releasing heat of the organic alkali reaction will automatically raise the temperature of the reaction system to the temperature required for the reaction without causing waste of energy.
- The use of new organic alkali raw materials has no environmental pollution, and there is no waste gas and wastewater in the production process of this new process, which is very consistent with the environmental protection concept of sustainable development.

8. Describe how your project demonstrates the company mindset “Everybody sells!” supported by our ACTS

- The success of this project cannot be separated from the efforts of everyone in the project team. When noticing the RTG orders that are about to be lost, everyone is concerned about how to develop new products to regain orders. Some people look for raw materials to replace, some optimize the reaction process, and some adjust the reaction products to match the needs of customers. Everyone is doing their best to participate in it. The success of the project made everyone feel proud of being a member of archroma. Let everyone feel the sense of participation in the development and sales of new products.

I declare to have read and accepted the privacy policy: <https://www.archroma.com/archroma-sustainability-awards-policy>

- Yes

In case the submitted project belongs to a team, I declare that I have the authorization of all of them and that they have read and agreed with the privacy policy (attach to the submission!!!).

- Yes, I have the consent of everybody in the team