

Glycerol Carbonate and Glycidol

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| Title of Product/Process/Design/Equipment | Glycerol Carbonate and Glycidol |
| IPR Status Patent/Copyright/Trademark Secured in India/Abroad IPR Details | Indian Patent filed |
| Application/Uses | Glycerol carbonate (4-hydroxymethyl-1,3-dioxolan-2-one) is one of the most promising chemical, due to its ideal physico chemical properties such as high stability, low toxicity, good biodegradability, high boiling point and low inflammability. Glycerol carbonate (GC) has many applications in the synthesis of polycarbonates, polyurethanes, surfactants, pharmaceuticals and cosmetics. |
| Salient Technical Features including Competing Features | IICT developed a catalytic system for the synthesis of glycerol carbonate by using DMC and urea as carbonating agents. In the same reaction by changing the catalyst glycidol is prepared with high selectivity from the same raw materials. |
| Level/Scale of Development | Lab scale at 20 g level |
| Environmental Considerations | Clean and green process |
| Status of Commercialization | |
| Major Raw Materials to be Utilized | Glycerol and Dimethyl carbonate/urea |
| Major Plant Equipment and Machinery Required | |
| Techno-Economics | Process is feasible at commercial scale |
| Technology Package | Can be made available upon request |

For further information please contact

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