

## Enzymatic Hydrolysis of Nitriles and Dinitriles

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An immobilized enzyme system derived from *Rhodococcus sp.* catalyses under neutral conditions the hydrolysis of nitriles (**1**)—(**6**) and dinitriles (**7**) and (**8**) into the corresponding acids (**1a**)—(**6a**) and monocyano carboxylic acids (**7a**) and (**8a**), respectively.

Although attempts have been made to develop mild procedures for the hydrolysis of nitriles,<sup>1</sup> the chemical hydrolysis of these molecules to carboxylic acids usually requires rather drastic, basic or acidic conditions,<sup>2</sup> often incompatible with molecules carrying sensitive functionalities. Moreover, especially in larger scale transformations, considerable quanti-

ties of inorganic salts are always produced as byproducts with unfavourable ecological consequences.

Clearly the hydrolysis of nitriles to carboxylic acids at room temperature and under neutral conditions would be highly attractive as an alternative synthetic tool.

In view of the amazing properties of enzymes in this respect



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