

38.15 - Reaction initiators, reaction accelerators and catalytic preparations, not elsewhere specified or included.

- Supported catalysts :

3815.11 - - With nickel or nickel compounds as the active substance

3815.12 - - With precious metal or precious metal compounds as the active substance

3815.19 - - Other

3815.90 - Other

This heading covers preparations which initiate or accelerate certain chemical processes. Products which retard these processes **are not included**.

These preparations fall broadly into two groups.

- (a) Those of the first group are, in general, composed either of one or more active substances deposited on a support (known as "supported catalysts") or of mixtures with a basis of active substances. In the majority of cases, these active substances are certain metals, metallic oxides, other metallic compounds or mixtures thereof. The metals most frequently used as such or as compounds are cobalt, nickel, palladium, platinum, molybdenum, chromium, copper or zinc. The support, sometimes activated, generally consists of alumina, carbon, silica gel, siliceous fossil meal or ceramic materials. Examples of "supported catalysts" are supported Ziegler or Ziegler-Natta types.
- (b) Those of the second group are mixtures with a basis of compounds whose nature and proportions vary according to the chemical reaction to be catalysed. These preparations include :
 - (i) "free radical catalysts" (e.g., organic solutions of organic peroxides or of azo compounds, redox mixtures);
 - (ii) "ionic catalysts" (e.g., alkylolithium);
 - (iii) "catalysts for polycondensation reactions" (e.g., mixtures of calcium acetate with antimony trioxide).

The preparations of the second group are generally used in the course of manufacture of polymers.

This heading **does not include** :

- (a) Spent catalysts of a kind used for the extraction of base metals or for the manufacture of chemical compounds of base metals (**heading 26.20**) and spent catalysts of a kind used principally for the recovery of precious metal (**heading 71.12**).
- (b) Separate chemically defined compounds (**Chapter 28 or 29**).
- (c) Catalysts consisting solely of metals or metal alloys in the form of finely divided powder, woven gauze, etc. (**Section XIV or XV**).
- (d) Prepared rubber accelerators for use in the vulcanisation of rubber (**heading 38.12**).