

Environmental Ministerial Decree January 24, 2011 n.20

INSTALLATIONS FOR BATTERIES STORAGE, RECHARGE, MAINTENANCE, WAREHOUSE AND REPLACEMENT - REGULATIONS FOR THE IDENTIFICATION OF THE ABSORBENTS AND NEUTRALIZERS SUBSTANCE QUANTITY

Perhaps not everyone knows that the sulfuric acid was already known in the XV century, when the first attempts to create it were made by burning sulfur in the presence of nitronium ion. The actual industrial production, however, took place around 1740 in England. Obviously near the factories air was polluted and sulfur dioxide saturated, hence the first laws to protect the environment were made.

The sulfuric acid contained in the batteries is a very dangerous substance. It is odorless and colorless and it can be often confused for water; it can be treated like water imperiling people and environment.

When the sulfuric acid comes in contact with water, it creates gas which could cause irritation of the respiratory tract, mucous membranes and eyes; moreover if it comes in contact with certain metals or other chemicals can cause strong reactions

The legislator regulated the plants security measures for storage, charging, maintenance and replacement of the batteries, to avoid possible accidents. The most recent law is the Ministerial Decree of 20 January 2011, which establish the total amount of neutralizing and absorbent substances, more precisely:

- Neutralizing and absorbent substances must be pre-tested by Universities or Specialized Institutes;
- The certification of functional compliance must be specified the amount needed for the complete absorption and perfect neutralization of 1 liter of acid solution, related to battery items charged, has a density of about 1.27 kg/dm3
- In case of elements with the electrolyte in gelatin form (Gel batteries), the amount needed for the
 total neutralization of the unit volume remains unchanged. The elements contain, for the same
 capacity, the same amount of electrolytic substance (liquid or gelatinous), with the same sulfuric
 acid proportion;
- The tested product must be used according to the manufacturer's instructions. It must be replaced
 at the end of the period of its full effect validity; that term must be clearly indicated on each
 container

With SOLFORLESS Airbank thought about a neutralizing agent specific for sulfuric acid. It respects the D.M. No.20, it is tested by the Department of Chemistry, Materials and Chemical Engineering of the Milan University, it is not toxic for people and the environment, it is 100% biodegradable.