

IMA-Europe's position on Essential requirements for inorganic soil improvers under the future Regulation on fertilizing materials

- 26 May 2014 -

ESSENTIAL REQUIREMENTS FOR SAFETY

Currently, there is no proposal from the Commission for safety Essential Requirements of inorganic soil improvers. For inorganic soil improvers, IMA-Europe proposes the same essential requirements (ERs) for safety as proposed for liming materials, i.e. maximum limits (total content) for selected heavy metals:

- Cd 3 (mg/kg dry matter)
- Cr VI 2 (mg/kg dry matter)
- Hg 2 (mg/kg dry matter)
- Ni 90 (mg/kg dry matter)
- Pb 200 (mg/kg dry matter)
- As 120 (mg/kg dry matter)

The rationale supporting this position is that both categories of materials originate from natural mineral resources and the origin of heavy metals is geogenic.

ESSENTIAL REQUIREMENTS FOR EFFICACY

Inorganic soil improvers improve the characteristics of the soil in order to stimulate plants growth. Amongst examples, we may list the following properties:

- Clay used in combination with organic matter and clay will assist the improved structure, chemistry and biological activity of the soil.
- Diatomite stimulates healthy growth of plant root systems. It conditions the soil by making silica available to plants and by helping the soil to retain moisture
- Sepiolite is used to check water and fertilizer loss in sandy soils because of its high capacity for water retention
- Sorptive clay (e.g. bentonite) modifies soil structure decreasing the excess of compacting of original soil aggregates
- Clay (e.g. attapulgite) into the soil decreases suction pressures from the soil and for this reason, it increases water availability. This means a decrease in watering frequency

Due to the variety of properties delivered by inorganic soil improvers, it is difficult to focus on one specific requirements for efficacy. Somehow each inorganic soil improvers will have its set of ERs for efficacy. Still, it is usually possible to determine these properties. For instance, the water absorption capacity of clay can be determined and various standards exist.

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