P3 Lignin-based Dispersants for Solid (WG) and Liquid (SC) Formulations

固形製剤（顆粒水和剤）および液体製剤（懸濁製剤）用のリグニン系分散剤について

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Lignosulfonate is a sustainable polymer obtained as a co-product from cellulose production in a bio-refinery. Borregaard's biorefining operations are the largest of their kind globally, continued investment in the development of specialised lignin grades, and has resulted in a diversified product portfolio to meet the ongoing and substantial challenges in the formulation of crop protection products.

Advantageously, lignosulfonate is a REACH-exempt material registered by the Environmental Protection Agency (EPA) and Organic Materials Review Institute (OMRI). It is classified based on its ion-exchanged/modified form with the following major products: sodium (CAS# 8061-51-6); calcium (CAS# 8061-52-7); ammonium (CAS# 8061-53-8); magnesium (CAS# 8061-54-9); potassium (CAS# 37314-65-1); and sulfomethylated sodium (CAS# 68512-34-5).

In this poster session we will highlight Borregaard's lignosulfonates as dispersants in the formulation of both solid- and liquid-based formulations. Emphasis is placed on water-dispersible granules and suspension concentrates.

In terms of water dispersible granules, the focus is on combination of active products manufactured by extrusion, in-line with the growth in development and use of such products. A few active combination types will be presented to show how specialised lignosulfonate grades can meet ongoing challenges in this area. Key active ingredients studied are sulfonylureas, mancozeb, azoxystrobin, and tebuconazole .

The liquid formulation work will demonstrate a number of examples relating to how different lignosulfonate grades can be optimized to meet performance objectives within the suspension concentrate category. Key active ingredients presented will include azoxystrobin, tebuconazole and propanil.