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Abstracts

REPORT SCOPE:

According to The International Council of Chemical Associations (ICCA) more than 95% of the manufacturing processes need some or other chemicals to deliver their end products. From energy to technology and from FMCG to transportation, all most all industries rely on chemicals. Recent developments have shown surged use of specialty chemicals and materials in the industry. Currently, green solvent materials in commercial use include bio-based alcohols/diols (e.g., bio-based glycols)/triols (e.g., glycerol), lactate esters (mostly ethyl lactate), d-limonene, fatty acid methyl esters (mostly methyl soyate) and several others. These materials can be used directly as solvents or blended with other materials in a solvent formulation to achieve a specific combined target of cost, function and performance.

Bio-based alcohol is the largest biosolvent segment, mainly due to the vast use of bioethanol. Annual production of bioethanol globally is around 100 million metric tons. Most of the bioethanol is used as bio-fuel; non-fuel bioethanol only accounts for around 15% of global production. Solvent applications use 2 million metric tons of bioethanol per year.

In terms of geographical trends, chemical industry has experienced steep demand in the Asia-Pacific region as compared to North America and Europe. In China itself, the chemical industry employs 60 million employees which is close to 50% of the total global employment.

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