



## **CATALYSTS (ACCELERATORS) COMBUSTION OF FUEL/COMBUSTIBLES:**

We offer the market a series of special additives or catalysts for thorough and better quality combustion of different types of combustibles or fuels respectively. Users are: small individual furnaces, industrial – power supply boiler rooms, heating plants, thermoelectric power stations, incinerators, ...

With incinerating fuel, let it be coal, wood, refuse, heating fuel, fuel oil or others, we namely face problems such as:

- Too large a quantity of ash and soot and emission violation of chimney smoke gasses in the atmosphere ( $\text{NO}_x$ ,  $\text{SO}_2$ ,  $\text{SO}_3$ ,  $\text{CO}$ ,  $\text{CO}_2$ ), which of course means pollution of the environment;
- The appearance of residue and corrosion in incinerator installations themselves – combustion systems, boilers, chimney flues, etc;
- On account of residue reduced heating effect of the combustion system and increased use of fuel;
- Due to ignition of residue the possibility of fires in the combustion system, chimney flues etc;
- Harmful impact on health of staff working in thermoelectric power stations or heating plants, as well as on the population in the surroundings;
- Formation and creation of slime and corrosion in reservoirs for liquid combustibles.

Of course science and practise endeavour to limit the mentioned problems or reduce them with an aim to achieve more effective operation - which means produce more with cheaper energy, and at the same time pollute the environment a little as possible. Beside all the modern incineration techniques this can also be achieved with chemical resources – additives or catalysts (agent for improving and accelerating the combustion of fuel oil and fuels respectively). Their efficient effect has been known already since the 1960's and over the years know-how and expertise in this special field has grown and consequently more and more in practical use.

With respect to fuel oil, which is burnt in burners, we divide catalysts or additives into two segments:

### **1.) Catalysts and additives for solid fuels:**

*Above all coal, wood, wood shavings and refuse (in use are catalysts, neutralisers or additives respectively on a base of metal oxides or nitrates).*

### **2.) Catalysts and additives for liquid fuel oil or fuels:**

*Light and extra light heating fuel, middle distillates (fuel oil) and other liquid heating fuels or fuels (in use are catalysts, neutralisers or additives, the use of which depends on the type of heating fuel/ fuel and their chemical structure). In use are mainly metal oxides (Fe, Cr, Mg, Ca).*



**GOR d.o.o.**

Gospodarjenje z odpadki in reciklaža d.o.o.

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