Technical note 108: Use and influence of different evaporator fluids

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The microflame can be influenced by using different evaporaing liquids. By the additionally introduced carbon from the evaporating liquid, the heat quantity (= available power) is increased, while the flame temperature is lowered at the same time

Designation	Flame temperature	Toxic/non toxic	Colour of flame	Use
Pure hydrogen-oxygen flame (without any evaporating liquid)	~3000 °C	non toxic	Virtually invisible	Pure oxyhydrogen flame consisting of 2 parts hydrogen and 1 part oxygen. Neutral effect. Use for welding and soldering of platinum.
Methanol	~2200 °C	toxic 	Light Blue	Ideal for soldering and welding (except platinum). Disadvantage: toxic, difficult to obtain and strict conditions of storage. Often prohibited in private households.
Recommended for most applications by MIG-O-MAT:				
BLQ 1800	~1800 °C	non toxic	Light Blue	Ideal for soldering and welding (except platinum). Has largely dissolved methanol as an evaporator liquid several years ago.
MOM Flux	~1700 °C	toxic, contains methanol 	Green	Ready-to-use liquid. Has a slightly deoxidizing effect but does not replace the additional use of flux for covering and soldering. Disadvantage: not for welding platinum. Tends to crystallize and thus block the flame barriers and nozzles.
Oxydfrei 1:8	~1700 °C	toxic, contains methanol 	Green	Concentrate, in the glass top only dilute with methanol. Has a slightly deoxidizing effect, but in no case replaces the additional use of flux for covering and soldering. Disadvantage: not for welding platinum. Tends to crystallize and thus block the flame barriers and nozzles.
BLQ 1600	~1600 °C	non toxic	Light Blue	Provides a soft flame for soft soldering or flame polishing. Disadvantage: the hoses are connected so that they must be changed regularly or special hoses must be used.

Observe the relevant safety data sheets when using evaporator fluids:
http://www.mig-o-mat.com/en/downloads/