

NEW AND ABSOLUTE PREDATOR

 **TiboRex**
ABSOLUTE

ultra fast extinguishing agent



3 stages fire suppression from Tiborex Absolute Special Liquid Fire Extinguishing Agent

ultra fast extinguishing



Cooling Effect Fine Spray Droplets that penetrate fire

Tiborex Absolute produce very fine droplets, smaller than 100µm.



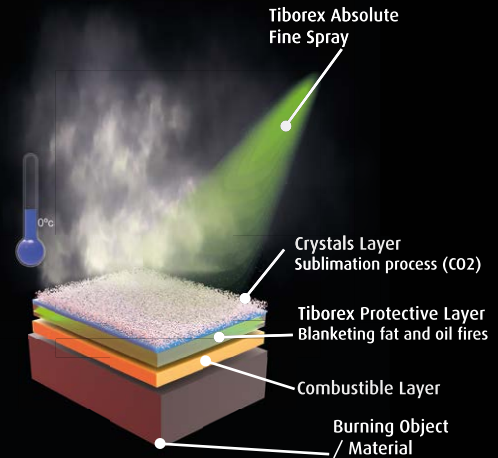
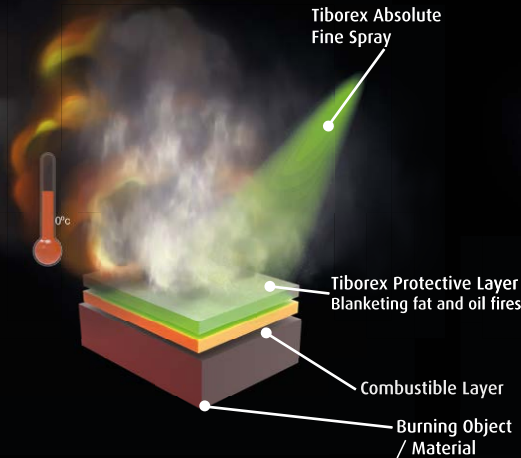
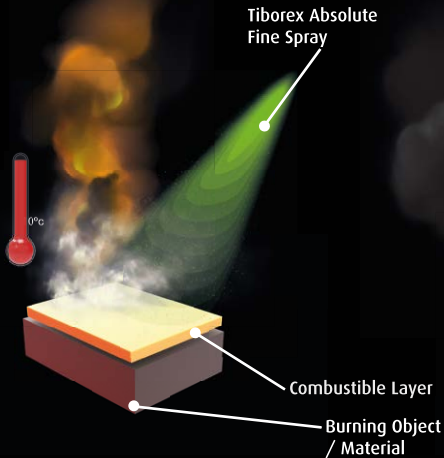
Oxygen Suffocation by evaporation

Due to the required enthalpy of evaporation of 2.26 MJ/kg (equivalent to 1 litre of water) energy is extracted from the burning object in a minimum of time and it cools down substantially.



Ultra Cooling through Sublimation Layering with solid crystals that convert to gas

Tiborex Absolute's main components form crystalline structures. With the still existing combustion temperature, these solid structures change from the crystalline phase to a gaseous phase. The enormous enthalpy of evaporation (heat) required for this amounts to 7.23 MJ/kg.



Extinguishing Agents Comparison



TiboRex
ABSOLUTE

FIRE EXTINGUISHING AGENTS COMPARISON	TiboRex Absolute	Water	Foam	Wetting Agent	Powder	Gas
Fast Temperature Reduction	+	-	-	-	-	-
Surface Blanketing	+	-	+	+	-	-
Quenching Effect	+	-	+	-	-	+
Fine-Spray Technology	+	+	-	+	-	-
Fluorine Free	+	+	-	-	-	+
Temperature Range -50°C to +80°C	+	-	-	-	+	-
Danger to Persons	+	+	-	-	-	-

NEW AND ABSOLUTE PREDATOR

The cooling effect

The enormous cooling effect of TiboRex Absolute is mainly based on **two physical properties**:

Ultrafast extinguishing

Only small amounts of extinguishing agent required. Tiborex rapidly delivers a huge cooling power. The object to be protected remains almost undamaged.

Quenching effect

Rapid removal of thermal energy therefore removing heat, hence no combustion or fire in hidden cavities.

Residue monitoring and guaranteed quality

Residues of the extinguishing agent on the object can be identified with the help of ultraviolet light. A chemical analysis (DNA) can verify and confirm that the original TiboRex Absolute was used.

Ultrafast cooling

Enormous reduction of surface temperature. Avoidance of re-ignition. Reduced effect of fire. Quick interruption of combustion process.

Blanketing fat and oil fires

When cooking fats and oils burn, TiboRex Absolute uses chemical reactions to form a closed, gas-proof protective layer quenching the fire and protecting the hot fat or oil from re-ignition by cooling them down very quickly.

Environmental friendliness

Ecological and 100% fluorine-free extinguishing agent
Biodegradable
Non toxic to humans and animals

Cooling effect due to water evaporation: The fine-spray nozzles developed specially for TiboRex Absolute produce very fine droplets, smaller than 100µm, when discharging the extinguishing agent. As a result, ultra-fast evaporation of the liquid share in the extinguishing agent is achieved. Due to the required enthalpy of evaporation of 2.26 MJ/kg (equivalent to 1 litre of water) energy is extracted from the burning object in a minimum of time and it cools down substantially.

Cooling effect due to sublimation: During the evaporation of the aqueous phase some of TiboRex Absolute's main components form crystalline structures. With the still existing combustion temperature, these solid structures change from the crystalline phase to a gaseous phase. The enormous enthalpy of evaporation (heat) required for this amounts to 7.23 MJ/kg.

 **TiboRex**
ABSOLUTE

protecfire GmbH
Weidekamp 10
23558 Lübeck
GERMANY
Phone: +49 (0) 451 399 61-10
Fax: +49 (0) 451 399 61-20
E-Mail: info@protecfire.de

www.protecfire.de

protecfire 
Made in Germany