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## DATA SHEET **STAG 11** Water based release agent for **Extrusion of metals and alloys** Compound of innovative release agents, in aqueous solution, formulated DESCRIPTION for the treatment of dummy block and billet in Extrusion of metals and alloys. It has been especially studied for Aluminium Extrusion. **TECHNICAL DETAILS** *Physical state:* Density ( $20^{\circ}C$ ): appr.1.20 g/ml liquid Colour: light blue Flammability: non-flammable Odour: very mild Solubility: water approx. 9.0 *pH* (*pure*): **SPECIFICATIONS** TEST METHOD STANDARD LIMIT Appearance Visual (AO/1) light blue pH (pure) Potentiom. (PM/1) 8.0 - 9.5 Density (20°C) Densim. (DE/2) 1.10 - 1.25 g/ml **CHARACTERISTICS** $\checkmark$ Very high releasing power at high process temperature: the product forms a very thermal resistant film on the treated surfaces. $\checkmark$ The Leidenfrost effect is greatly reduced, making possible the instantaneous deposition of a uniform and continuous film on hot surfaces with excellent adhesion. $\checkmark$ The films formed by STAG 11 is soluble in water and is thus easily washed out by a jet of water, leaving the machine perfectly clean. ✓ STAG 11 is a non-flammable product. It has an increased protective and anticorrosive power.

HOW TO USE	<ul> <li>DILUTION</li> <li>It is advisable to use the pure product or diluted in water. Sometimes it may be opportune, in order to optimize the application on the basis of the spraying equipment and spraying time, to dilute the product. The maximum suggested dilution ratio is 1:1 (max. 50% of added water).</li> <li>APPLICATION</li> <li>General Indications</li> <li>Spray the pure or diluted product at each cycle, on the dummy block, or on the surface of the billet that will keep in contact with the dummy block (or both billet + dummy block). Spray for a time long enough to cover the whole surface with a homogeneous thin layer of product. Normally a few seconds of spray are enough. For the application it is suggested to use systems able to atomize the product.</li> <li>Starting trials</li> <li>Apply the product manually by means of a simple sprinkler or better, by means of a manual pneumatic painting gun.</li> <li>Standard application</li> <li>Apply the product well atomized, avoiding excessive pressures that give rebound of the droplets toward the machine parts.</li> <li>With spraying device provided with regulation of atomizing air pressure.</li> <li>Product pressure: between 0.6 and 1.0 bar</li> <li>Atomizing air pressure: slightly higher, between 0.8 and 1.4 bar.</li> <li>To find the best application start setting the product pressure at 0.8 bar, then change the atomizing air pressure till a good atomization is obtained, without overspray and rebound. If necessary reduce the product pressure.</li> </ul>
	With spraying device without regulation of atomizing air pressure. Air pressure must be $0.5 - 1.0$ bar higher than product pressure. The values depend on the distance between spraying nozzles and surface to treat.
STORAGE	<ul> <li>Avoid long stockage under the sun.</li> <li>Shelf life: not less than 18 months, in original closed containers.</li> <li>Keep closed containers.</li> </ul>
PACKAGING	<ul> <li>Pail: 20 Kg net</li> <li>Drum: 220 Kg net</li> <li>IBC: 1100 Kg net</li> </ul>
FURTHER INFORMAT.	For information regarding safety, transport and disposal refer to the Safety Data Sheet of the product.

The data in this technical information sheet correspond to the properties of the product at the time of the sale and with regard to the specified application. It is on the responsibility of the user to make sure that the product is suitable for the use to which he intents to destinate it.