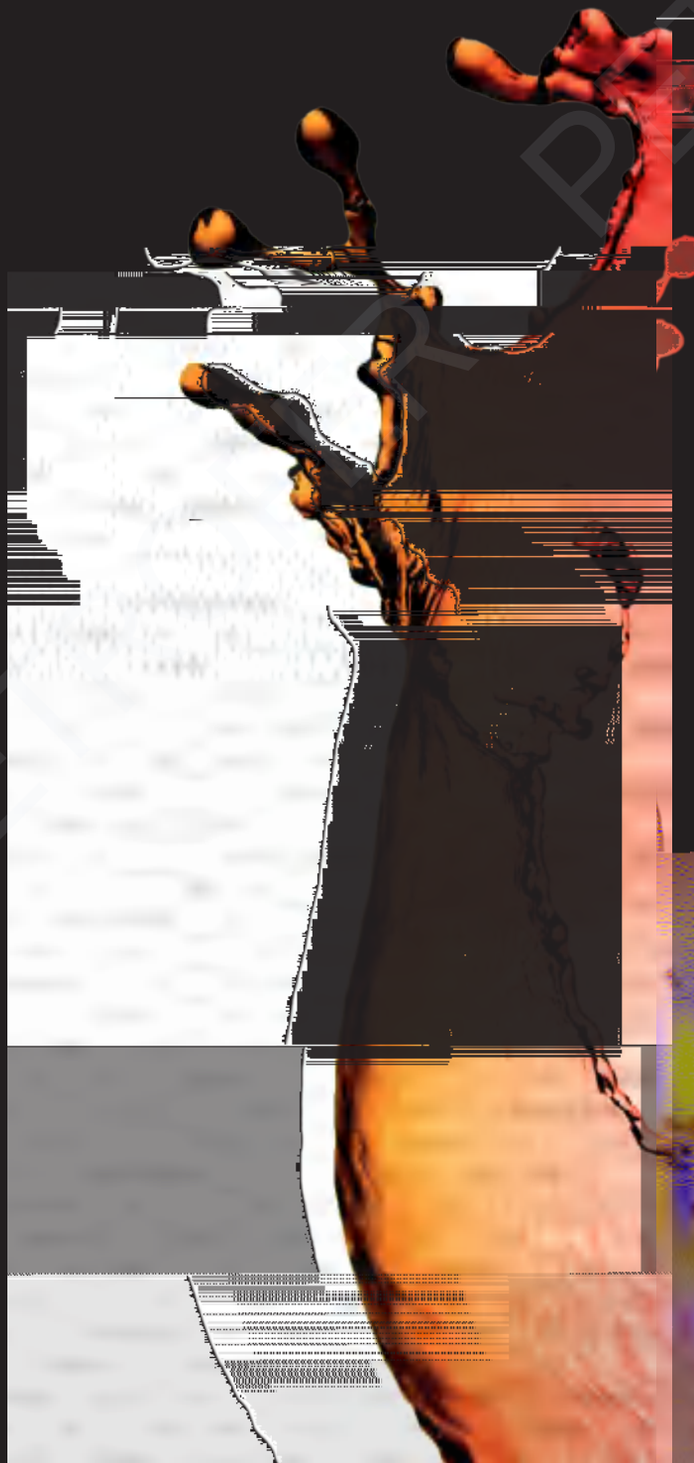
RELEASE AGENTS
PISTON LUBRICANTS
DIE-FORGING AGENTS
HEAT TRANSFER FLUIDS



# DIE-CASTING & FORGING MEDIA

## Release agents

| | | | |
|---|---|---|---|
| DIE-LUBRIC 1060 BS | ǐ<br><br>Polysiloxane<br>Wax | 1:80 – 1:120 | – Ḅ ╥ ́ ớ<br>– ڈ<br>– ˌ<br><br>– Good coating performance<br>– Suitable for clean and light and thin surface castings<br>– Excellent demolding effect |
| DIE-LUBRIC 5050 BS | ǐ<br>ă<br>ꞈ<br><br>polysiloxane<br>Wax<br>Synthetic Oil<br>Mineral oil | 1:70 – 1:100 | – Ḅ ╥ ớ<br>– ῶ ڳ ꞈ ẻ ă<br>– ₹ ╥ ⁼⌈ ᵩ ꞈ ˀ ▌ڻ<br><br>– Good coating performance<br>– Effectively prevent the formation of residues<br>– Easily remove soft residue on the surface after excessive spraying |
| DIE-LUBRIC SH 93 | ǐ<br><br>Polysiloxane<br>Wax | 1:100 – 1:140 | – Ḅ ╥ ớ<br>– ῶ ڳ ꞈ ẻ ă<br><br>– Good coating performance<br>– Effectively prevent the formation of residues |

## Special release agent for micro spray applications in large die casting

| PRODUCT MODEL<br>β 1 | COMPOSITION<br>ă ʻ | MIXING RATIO<br>▌ æ | PRODUCT FEATURE<br>≠ ớ |
|---|---|---|---|
| DIE-LUBRIC 37411 | ă<br>Synthetic Oil | Primary liquid | – ṇ ṇ<br>– d ▌ ẽ φ ₺ ₸ ৲<br>– ƥ ⊀ τ □ ỷ τ ũ ˚ Ḅ<br>– Wax-free and Silicon-free<br>– Free cleaning and no influence on subsequent spraying and adhesive<br>– Good release abiloty at high mold temperature |
| DIE-LUBRIC HT 380 | ă<br>Synthetic Oil | /1:50 - 1:100<br>Primary liquid<br>/1:50 - 1:100 | – ṇ ṇ<br>– d ▌ ẽ φ ₺ ₸ ৲<br>– Ẓ h ₺ ₸ ỉ ₺<br>– Wax-free and Silicon-free<br>– Free cleaning and no influence on subsequent spraying and adhesive<br>– Suitable for common spraying and micro spraying |

## - Zinc Die Casting - water dilution

| PRODUCT MODEL<br>β 1 | COMPOSITION<br>ă ʻ | MIXING RATIO<br>▌ æ | PRODUCT FEATURE<br>≠ ớ |
|---|---|---|---|
| DIE-LUBRIC 33 ZN | ⊦<br>Mineral oil | 1:30 – 1:80 | –<br>– τ □ ỷ >100 ỷ<br>– Ḅ گ ớ<br>– ỉ ⊣ ⊦<br>– א ũ ₸<br>– Wax-free and Silicon-free<br>– Suitable for mold temperature>100<br>– Antibacterial performance<br>– Realize effective coating of castings |
| DIE-LUBRIC 303 ZN | ⊦<br>Mineral oil | 1:20 – 1:80 | –<br>– ,<br>– ũ ڳ ⊦ ė ă<br>– Wax-free and Silicon-free<br>– Excellent release and lubrication effect<br>– Effectively prevent the formation of residues |

## - Zinc Die Casting - Non water dilution

| PRODUCT MODEL<br>β 1 | COMPOSITION<br>ă ʻ | FLASH POINT<br>ᵽ | PRODUCT FEATURE<br>≠ ớ |
|---|---|---|---|
| DIE-LUBRIC FL 453 | ă<br>Synthetic ester | > 240 °C | –<br>– ṇ<br>– ỉ ₺ Ẓ<br>– τ ũ ^ ○ ę ồ ৸ ৲<br>– Siloxane free<br>– Solvent-free<br>– Release agent for micro spray applications<br>– Suitable for fast running systems with multi slider technology |

## - Fluid Piston Lubricants - graphite-free

| PRODUCT MODEL<br>β 1 | VISCOSITY 40°C<br>ˬ ỷ 40°C | FIRE POINT<br>Ḥ ᵽ | APPLICATION RANGE<br>Ẓ ḅ |
|---|---|---|---|
| PISTON LUBRICANT GF 3 | ˥ 300 mPas | > 280 °C | – ŧ ˌ ◕ ○<br>– ʒ̄ l Ế |
| PISTON LUBRICANT GF 5<br>PISTON LUBRICANT GF 7 | ˥ 630 mPas<br>˥ 900 mPas | > 280 °C<br>> 280 °C | – ŧ ˌ ◕ ○<br>– ᶻ ʒ̄ l Ế |

## - Fluid Piston Lubricants - graphite

| | | | |
|---|---|---|---|
| PISTON LUBRICANT AP 270 | 2150 mPas | > 280 °C | – l ◕ ○<br>– ˥ ʒ̄ l Ế |
| PISTON LUBRICANT AP | 2400 mPas | > 280 °C | – ◕ ○<br>– ˥ ʒ̄ l Ế |

## - Solid Piston Lubricants - graphite-free

| PRODUCT MODEL<br>β 1 | COMPOSITION<br>ă ʿ | MELTING RANGE<br>Ṛ ḅ | PARTICLE SIZE<br>˧ ỷ |
|---|---|---|---|
| PISTON POWDER FG | ˳ ŧ | 77 – 82 °C | 0.5 – 1.5 mm |
| PISTON POWDER FG-P | ǐ | 98 – 103 °C | 0.5 – 1.5 mm |

# PISTON LUBRICANTS

Our piston lubricant and piston powder products include graphite-containing and graphite-free piston lubricants. All development for superior lubrication and to meet the demands of a high-quality and economical die casting process.

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# DIE-FORGING AGENTS

Our series of die forging products include water dilutable and anhydrous lubricants for die forging and hot pressing. Both graphite-containing and graphite-free products meet the most stringent quality standards and help to extend the life of molds.

## - Forging agent - water diluted, graphite free

| PRODUCT MODEL<br>β 1 | APPLICATION CONCENTRATION<br>Ƶ ╟ ў | APPLICATION RANGE<br>Ƶ ɓ |
|---|---|---|
| DIE-FORGENT GF 25 | 5 – 10 % | – ƀA ƺ Å ɯ ч ═<br>– ƺ Ĭ ⊦ g β<br>– Suitable for simple to medium weight steel components with flat contours<br>– Light salts and polymer-based products |
| DIE-FORGENT GF 15BD | 5 – 15 % | – ƀA ƺ Å ɯ ч ═<br>– ƺ Ĭ ⊦ g β<br>– Suitable for simple to medium weight steel components with flat contours<br>– Light salts and polymer-based products |
| DIE-FORGENT GF 2 | 5 – 20 % | – Ĭ ע ч ſ ○ ч ſ<br>– ʒ<br>– ɜ ł Ĭ ⊦ g β<br>– |

## - Forging agent - water diluted, graphite

| PRODUCT MODEL<br>β 1 | SOLID CONTENT<br>ɖ | ROTATIONAL VISCOSITY 25°C<br>ʾ ҷ ч ў 25°C | APPLICATION RANGE<br>Ƶ ɓ |
|---|---|---|---|
| DIE-FORGENT WL 155 | >15% | >1000 | ॰ |
| DIE-FORGENT WL 149 | >15% | >1000 | ॰ |
| DIE-FORGENT WL 148 | >15% | >1000 | ॰ |

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## Forging agent - non-water diluted, graphite

| PRODUCT MODEL β 1 | SOLID CONTENT ɖ | ROTATIONAL VISCOSITY 25°C ' ҷ ৲ ў 25°C | APPLICATION RANGE Ƶ ɓ |
|---|---|---|---|
| DIE-FORGENT AP 280 S-A | >10% | >100 | ও Aluminum, steel forging |
| DIE-FORGENT AP 280 S | >10% | >100 | ও Aluminum, steel forging |

# HEAT TRANSFER FLUIDS

Heat transfer fluids for molds, heating and cooling equipment, and other heat transfer systems with excellent aging resistance; available in synthetic or mineral oils.

| PRODUCT MODEL β 1 | COMPOSITION ă ʿ | VISCOSITY 40°C ৲ ў 40°C | FIRE POINT Ɦ ᵖ | MAXIMUM FLUID TEMPERATURE ѡ ঽ ч □ ў |
|---|---|---|---|---|
| TRANSTHERM 496 | ⊦ Mineral oil | 30 mm2·s | 230 °C | 320 °C |
| TRANSTHERM 525 | ă ⊦ ⊦ Synthetic hydrocarbon | 21 mm2·s | 195 °C | 310 °C |
| TRANSTHERM 617 | ă ⊦ ⊦ Synthetic hydrocarbon | 17 mm2·s | 205 °C | 365 °C |

1 QUENCHANTS
2 DIE-CASTING & FORGING MEDIA
FIRE-RESISTANT HYDRAULIC FLUIDS
METAL WORKING FLUIDS
METAL FORMING LUBRICANTS
INDUSTRIAL LUBRICANTS
INDUSTRIAL CLEANERS
RUST PREVENTATIVES
PAPER CHEMICALS
10 GREASES