

UNIPRESS PA1, PA2, PA1L, PA-L

Quick-Drying Metal Working Oil

UNIPRESS PA Series is quick-drying metal working oil for the punching of a thin plate as main application. It also provides excellent performance in the shallow drawing and bending of general metal materials except resin coating materials.

● Special Features

1. Omission or simplification of degreasing and washing step

2. Excellent drying property

UNIPRESS PA Series shows superior drying characteristics and does not leave oil on the press surface.

3. Extension of the mold polishing interval

By the effect of high-performance anti-wear agent, extension of the mold polishing interval can be expected.

4. Long-term superior finish accuracy

5. Outstanding rust preventing property

It can prevent rust around 2-4 weeks in the indoor storage according to the environmental conditions.

6. Chlorine-free oil

7. Applicable to a wide range of materials

● Applications

(1) Electromagnetic steel, low alloy steel, hard aluminum, copper, copper alloy strips

(2) Press working such as punching, bending and shallow drawing of thin sheet (plate thickness: 1mm or less)

(3) Application Example

Processing of each part including motor, generator core, transformer iron core, electric equipment, household appliance, communication instrument, automobile, precision machinery, air-conditioning machine and office supplies.

Example of use

(1) Punching of large generator core and large transformer iron core (type I and E).

(2) High speed punching of hermetic motor core for refrigerator.

(3) Stamping of small and middle-sized general-purpose motor core.

Electromagnetic silicon steel sheets: 0.35mm, 0.5mm, 0.8mm

General steel sheet (cold-rolled): 0.6mm

(4) Stamping and bending of the chassis of household appliance and parts of automobile.

Nickel silver: 0.8mm

Stainless: 0.4 ~ 0.6mm

General steel sheet (including bending): 0.8mm

(5) Shallow drawing, bending and stamping of home heating appliances.

Stove bottom plate, combustion tube, general steel sheet (cold-rolled): 0.4 ~ 0.6mm

● Performance comparison of the PA series

PA1: Standard type of quick-drying punching processing oil.

PA2: Low-odor compared with PA1, and contributes to the improvement of the working environment.

PA1L: Superior drying property compared with PA1.

PA-L: Superior drying property and improved extreme pressure performance compared with PA1. It is ideal oil for high-speed punching and welding work immediately after punching, enables life extension of high-speed punch and mold.

● **Containers**

200-liter drum, 20-liter can

● **Typical Properties of Unipress PA series**

Unipress		PA1	PA2	PA1L	PA-L
Item		Quick drying property	Low-odor	Superior drying property	Superior drying property, Improved workability
Color(ASTM)		L0.5	L0.5	L0.5	L0.5
Density (15°C)	g/cm ³	0.775	0.750	0.768	0.768
Kinematic viscosity (40°C)	mm ² /s	1.03	1.25	0.93	0.92
Flash point (TC)	°C	46.0	-	40.5	41.5
Flash point (PM)	°C	-	69.0	-	-
Pour point	°C	-45	-40	-45	-45
Copper strip corrosion(50°C,3h)		1	1	1	1



Note: The typical properties may be changed without notice. (October 2010)




Handling Precautions

▼ Follow these precautions when handling this product.

UNIPRESS PA 1, UNIPRESS PA 2

Composition :	Base Oil, Additives
Precautionary pictograms:	 
Signal word:	Danger
Hazard Statement:	Flammable liquid and vapour May be fatal if swallowed and enters airways
Precautionary Statements: Prevention	<ul style="list-style-type: none">• Do not handle until all safety precautions have been read and understood.• Wear protective gloves/protective clothing/eye protection/face protection.• Do not allow the eyes to become exposed to the product. Do not swallow the product.• Keep away from heat/sparks/open flames/hot surfaces – No smoking.• Use explosion-proof electrical/ventilating/lighting/equipment.• Ground/bond container and receiving equipment.• Use only non-sparking tools.• Take precautionary measures against static discharge.• Wash hands thoroughly after handling.• Do not eat, drink or smoke when using this product.
Response	<ul style="list-style-type: none">• IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.• IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.• If the eyes are exposed to the product: Rinse the eyes with plenty of running water and immediately contact a physician.• IF ON SKIN: Wash with plenty of soap and water.• IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.• Do NOT induce vomiting.• In case of fire: Use suitable extinguishing media for extinction.
Storage	<ul style="list-style-type: none">• The product must be stored in a cool, well-ventilated location where it will not be exposed to direct sunlight.• Containers that have been opened must be tightly sealed.• Keep container tightly closed.• Store in a well ventilated place. Keep cool.• Store locked up.
Disposal	<ul style="list-style-type: none">• Dispose of contents/container in accordance with local/regional/national/international regulations.• If there are any doubts about proper methods of handling the product, contact the point of purchase before proceeding with usage.

UNIPRESS PA 1L, UNIPRESS PA-L

Composition :	Base Oil, Additives
Precautionary pictograms:	
Signal word:	Danger
Hazard Statement:	<p>Flammable liquid and vapour</p> <p>Causes skin irritation</p> <p>May cause respiratory irritation ; or May cause drowsiness or dizziness</p> <p>May cause damage to organs (state all organs affected(liver,testis), if known) through prolonged or repeated exposure</p> <p>May be fatal if swallowed and enters airways</p>
Precautionary Statements: Prevention	<ul style="list-style-type: none"> • Do not handle until all safety precautions have been read and understood. • Wear protective gloves/protective clothing/eye protection/face protection. • Do not allow the eyes to become exposed to the product. Do not swallow the product. • Keep away from heat/sparks/open flames/hot surfaces – No smoking. • Use explosion-proof electrical/ventilating/lighting/equipment. • Ground/bond container and receiving equipment. • Use only non-sparking tools. • Take precautionary measures against static discharge. • Use only outdoors or in a well-ventilated area. • Do not breathe dust/fume/gas/mist/vapours/spray. • Wash hands thoroughly after handling. • Do not eat, drink or smoke when using this product.
Response	<ul style="list-style-type: none"> • IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. • IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. • If the eyes are exposed to the product: Rinse the eyes with plenty of running water and immediately contact a physician. • IF ON SKIN: Wash with plenty of soap and water. • IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. • Get Medical advice/attention if you feel unwell. • IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. • Take off contaminated clothing and wash before reuse. • If skin irritation occurs : Get medical advice/attention. • Remove contact lenses if present and easy to do. Continue rinsing. • Do NOT induce vomiting. • In case of fire: Use suitable extinguishing media for extinction.
Storage	<ul style="list-style-type: none"> • The product must be stored in a cool, well-ventilated location where it will not be exposed to direct sunlight. • Containers that have been opened must be tightly sealed. • Store in a well ventilated place. Keep container tightly closed. • Store in a well ventilated place. Keep cool. • Store locked up.
Disposal	<ul style="list-style-type: none"> • Dispose of contents/container in accordance with local/regional/national/international regulations. • If there are any doubts about proper methods of handling the product, contact the point of purchase before proceeding with usage.