

1-1-2 Otemachi, Chiyoda-ku, Tokyo 100-8162, Japan

IND-5001-2304E

# **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: 0.5mm 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 <sup>3</sup>	0.775	0.749	0.770	0.768
Kinematic viscosity (40°C)	$mm^2/s$	1.03	1.25	0.985	0.977
Flash point (TC)	$^{\circ}\!\mathbb{C}$	42.0	-	41.0	41.0
Flash point (PM)	$^{\circ}\!\mathbb{C}$	-	67.0	-	-
Pour point	$^{\circ}\!\mathbb{C}$	-45	-40	-45	-45
Copper strip corrosion (50°C,3h)		1	1	1	1

Note: The typical properties may be changed without notice. (April 2023)

# Handling **Precautions**

lacktriangledown Follow these precautions when handling this product.

### UNIPRESS PA1, UNIPRESS PA2

Composition:	Base Oil(s), Additives		
Precautionary pictograms:			
Signal word:	Danger		
Hazard Statement:	Flammable liquid and vapour		
	May be fatal if swallowed and enters airways		
Precautionary Statements:	• Do not handle until all safety precautions have been read and understood.		
Prevention	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, hot surfaces, sparks, open flames and other ignition sources. No smoking.		
	Ground and bond container and receiving equipment.		
	• Use non-sparking tools.		
	Take action to prevent static discharges.		
	Keep container tightly closed.		
	Wash hands thoroughly after handling.		
	• Do not eat, drink or smoke when using this product.		
Response	• IF SWALLOWED: Immediately call a POISON CENTER/doctor.		
	• 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): Take off immediately all contaminated clothing.		
	Rinse skin with water [or shower].		
	• Do NOT induce vomiting.		
Storage	• 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 cool.		
	Store locked up.		
Disposal	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 PA1L, UNIPRESS PA-L

Composition:	Naphthenic Hydrocarbons, Additives		
Precautionary pictograms:			
Signal word:	Danger		
Hazard Statement:	Flammable liquid and vapour		
	May be fatal if swallowed and enters airways		
Precautionary Statements:	• Do not handle until all safety precautions have been read and understood.		
Prevention	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, hot surfaces, sparks, open flames and other ignition sources. No smoking.		
	Ground and bond container and receiving equipment.		
	• Use non-sparking tools.		
	• Take action to prevent static discharges.		
	Keep container tightly closed.		
	Wash hands thoroughly after handling.		
	• Do not eat, drink or smoke when using this product.		
Response	• IF SWALLOWED: Immediately call a POISON CENTER/doctor.		
	• 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): Take off immediately all contaminated clothing.		
	Rinse skin with water [or shower].		
	• Do NOT induce vomiting.		
Storage	• 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 cool.		
	• Store locked up.		
Disposal	• 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.		