

IND-6106-2007E



# **RELIAPRESS RA Series**

High performance chlorine-free press oils

**RELIAPRESS RA** is press oil especially for several press works such as deep-drawing, punching and bending work of steel plate.

# Special Features

**1. RELIAPRESS RA** is environmentally-friendly oil free of dioxin generation, because chlorine and lead additives are not contained. It can also prevent forming rust on products and machines.

**2. RELIAPRESS RA** keeps operation temperature low by the excellent lubricity. It can suppress the surface coloration of products, and also prolong metallic mold life.

**3. RELIAPRESS RA** is suitable as a press oil for wide materials such as SS, SC and SUS, etc.

#### Grades

Since **RELIAPRESS RA** is available in six viscosity grades ranging ISO 15 to 220, it can meet many different conditions.

# • Applications

**RELIAPRESS RA** is suitable for metal forming such as deep drawing, punching and bending of steel sheets such as carbon steel sheet and galvanized steel sheet.

#### Containers

200-liter drums and 20-liter cans

Grade		15	20	30	60	150	220
Color(ASTM)		L2.0	L2.0	L2.0	L2.0	L3.5	L3.0
Density (15°C)	g/cm <sup>3</sup>	0.872	0.879	0.874	0.896	0.928	0.930
Kinematic viscosity (40°C)	mm <sup>2</sup> /s	15	20	30	55	150	215
Flash point (COC)	°C	178	188	222	228	218	222
Sulfur content	mass%	2.0	2.0	2.0	2.0	4.5	4.5
Acid number	mg KOH/g	1.7	1.7	1.7	1.7	3.8	3.8
Copper strip corrosion(100°C,1h)		1	1	1	1	1	1

### • Typical Properties of RELIAPRESS RA Series

Note: The typical properties may be changed without notice. (Aug. 2019)



# RELIAPRESS RA 15, 20

Composition :	Base Oil(s), Additives
Precautionary pictograms :	
Signal word:	Danger
Hazard Statement:	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.
	• Wash hands thoroughly after handling.
	• Do not eat, drink or smoke when using this product.
Response	• 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.
	• 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 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.

#### RELIAPRESS RA 30, 60

Composition :	Base Oil(s), Mineral Oil, Triethanolamine	
Precautionary pictograms:	Not applicable	
Signal word:	Not applicable	
Hazard Statement:	Not applicable	
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.	
	• Wash hands thoroughly after handling.	
	• Do not eat, drink or smoke when using this product.	
Response	• 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.	
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.	
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.	

#### RELIAPRESS RA 150, 220

Composition :	Base Oil(s), Additives
Precautionary pictograms:	
Signal word:	Warning
Hazard Statement:	Causes serious eye irritation
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.
	• Wash hands thoroughly after handling.
	• Do not eat, drink or smoke when using this product.
Response	• 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 IN EYES: Rinse continuously with water for several minutes. Remove contact lenses
	if present and easy to do. Continue rinsing.
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.
Disposal	$\bullet \ Dispose of \ contents/container \ in \ accordance \ with \ local/regional/national/international$
	regulations.
	• If there are any doubts about proper methods of handling the product, contact the point of
	purchase before proceeding with usage.