

Description

Presspate SEM 95/800 is a deep drawing lubricant for sheet drawing. The grease is very soft and easily spreadable, which makes it economical in application.

Application

Presspate SEM 95/800 is used for thin sheet pressing for materials as e.g.

- steel sheets,
- platinized steel sheets,
- special steel sheets,
- aluminum sheets, and
- sheets made of copper alloys.

Application processes

- deep drawing,
 - stretch forming,
 - pressing,
- and comparable manufacturing processes.

Application notes

Presspate SEM 95/800 is a ready-to-use product. It can be applied manually or automatically. The application should be in the temperature range between 35 and 50 °C because consistency mainly depends on the temperature.

Automatically

- rolling
- spraying with grease lubricating devices

Manually

- rolling
- by brush

The drawn parts can be cleaned with acidic or alkaline-aqueous cleaners.

Package sizes

25 kg bucket
200 kg drum

Storage

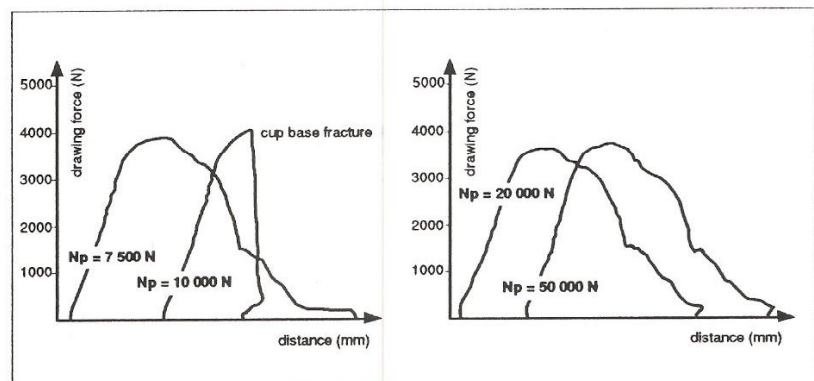
Storage time 2 years

Presspate SEM 95/800

- very efficient in deep drawing
- good anticorrosion properties
- can be removed easily
- very economical
- environmentally friendly
- free from chlorine

Mechanical-dynamic testing of deep drawing lubricants

The suitability tests and quality controls of Klüber Lubrication products are carried out with an especially adapted test rig in accordance with the cupping test.



Results:

Force-distance diagram of a low-quality deep drawing product (cup base fracture occurs already with a clamping force of 10,000 N).

Deep drawing sheet:

St 4

Die speed:

$v = 3\text{ mm/s}$

Clamping force:

$N_p = 7,500\text{ and }10,000\text{ N}$

Force-distance diagram of a deep drawing product suitable also for complex drawing processes – Presspate SEM 95/800 (perfect operation possible with a clamping force of 50,000 N).

Deep drawing sheet:

St 4

Die speed:

$v = 3\text{ mm/s}$

Clamping force:

$N_p = 20,000\text{ and }50,000\text{ N}$

Presspate® SEM 95/800

Material Safety Data Sheet

Section I		
Manufacturer's name: Klüber Lubrication München KG		
Chemical name and synonyms: Lubricating grease		
Trade name and synonyms: Presspate SEM 95/800		
Chemical family: Mineral oil, tallow, waxy hydrocarbons, inorganic solid lubricant		
Formula: Proprietary		
Section II – Hazardous Ingredients		
Paints, preservatives, solvents		
	%	TLV (units)
Pigments	–	–
Catalyst	–	–
Vehicle	–	–
Solvents	–	–
Additives	–	–
Others	–	–
Alloys and metallic coatings		
	%	TLV (units)
Base metal	–	–
Alloys	–	–
Metallic coatings	–	–
Filler metal plus coating or core flux	–	–
Others	–	–
Hazardous mixtures of other liquids, solids, or gases		
– –		
Section III – Physical Data		
Boiling point:	n/a	
Vapor pressure (mm Hg):	n/a	
Vapor density (air=1):	n/a	
Solubility in water:	not soluble	
Specific gravity (H ₂ O=1):	approx. 0.95	
Percent, volatile by volume (%):	0	
Evaporation rate (.....=1):	n/a	
Appearance and odor:	beige, neutral odor	
Section IV – Fire and Explosion Hazard Data		
Flash point (base oil)	> 200 °C, ASTM D-92	
Flammable limits: – –	Lel:	Uel:
Extinguishing media: water fog, foam, dry chemical, CO ₂		
Special fire fighting procedures:		
Use self-contained breathing apparatus, cool fire exposed areas and equipment.		
Unusual fire and explosion hazards:		
Do not use direct stream of water, material may float and reignite.		
<small>n/a = not applicable</small>		

Section V – Health Hazard Data
Threshold limit value: n/a
<i>Effects of overexposure:</i>
Eyes: Mild irritation
Skin: Mild irritation, may cause dermatitis, oil acne or folliculitis with repeated contact.
Ingestion: No more than slightly toxic if swallowed.
Inhalation: n/a
<i>Emergency and first aid procedures:</i>
Eyes: Flush with large amount of water.
Skin: Remove contaminated clothing, wash skin with soap and water, launder clothing prior to reuse.
Ingestion: Contact doctor for directions. Never give anything by mouth to an unconscious person.
Section VI – Reactivity Data
Stability: stable
Incompatibility (materials to avoid):
Strong oxidizing materials, such as pure oxygen
Hazardous decomposition products: n/a
Hazardous polymerization: will not occur
Section VII – Spill or Leak Procedures
Steps to be taken in case material is released or spilled:
Eliminate all sources of ignition. Collect lubricating grease. Keep product out of waterways.
Waste disposal method:
Incinerate material or dispose of in accordance with your local, state and federal regulations.
Section VIII – Special Protection Information
Respiratory protection (specify type): n/a
Ventilation: n/a
Local exhaust: recommended
Special: – –
Mechanical (general): – –
Other: – –
Protective gloves: n/a
Eye protection: n/a
Other protective equipment: no
Section IX – Special Precautions
Precautions to be taken in handling and storing:
Minimize skin contact with all lubricants. Wash with soap and water prior to eating, drinking, smoking or using sanitary facilities.
Other precautions:
All chemical products should be handled as to prevent constant or repeated contact.

This information corresponds with the state of our knowledge at the time of printing and is intended to give information of possible applications to a reader with technical experience. The assurance of properties, product responsibility or guarantee are impossible without our clarification as to the specific application of use and service conditions.



Klüber Lubrication, a member of the Freudenberg group of companies