

## Keeping one step ahead with Klüber Lubrication

- Klüber Lubrication offers one of the most comprehensive range of lubricants which is available around the globe.
- Speciality lubricants from Klüber Lubrication increase productivity and reliability while ensuring economical machine operation. Lubricant quantities can often be reduced due to our lubricants high performance level.
- We work in close cooperation with machinery OEMs and develop lubrication solutions tailored to the respective lubrication points.
- The combination of KlüberEfficiencySupport, our service concept, along with the lubricant range and lubricant devices ensures optimum functionality and long machinery lifetime.

### Your benefits at a glance:

- Biodegradable
- NSF A1 registered
- No harmful vapours
- Free of organic solvents and phosphates
- Gentle to plastics, seals, rubber and sensitive metal surfaces
- Good separation behaviour
- Depending on the degree of soiling, can be diluted up to 1:10
- Suitable for use with high-pressure cleaners
- Synergetic combination of active substances with corrosion protective additives

It is our aim to offer you high-quality speciality lubricants and services around the globe along with the high technical competence Klüber Lubrication is known for. We meet this aim through our worldwide network of production and sales companies, and our highly specialised local experts are ready to respond to your individual requirements.

Contact our specialists now to learn more about our solutions or write an email to: [sales@my.klueber.com](mailto:sales@my.klueber.com)


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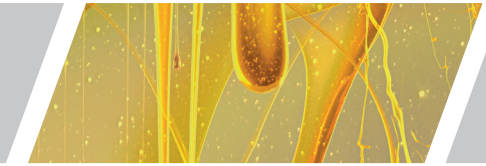

your global specialist

## Klüberbio NA1 Z 0-001 AP

Biodegradable Industrial Cleaner,  
water-based concentrate



# Industrial alkaline cleaner based on water for removing oily, greasy and sooty soiling



## Biodegradable industrial cleaner, water-based concentrate

Klüberbio NA1 Z 0-001 AP is an **eco-compatible industrial alkaline cleaner based on water** for removing oily, greasy and sooty soiling.

It is NSF A1 registered which makes it safe to be used in food and beverage industry. Klüberbio NA1 Z 0-001 AP is gentle to plastics, seals, rubber and sensitive metal surfaces and does not affect the surface of the component where applied.

It is free of organic solvents and phosphates, hence it does not affect the environment and is not harmful to health.

Klüberbio NA1 Z 0-001 AP can be applied in various processes such as cleaning of machine tools, workshop floors, cleaning of construction machines, lorries, tarpaulins, cleaning of cooling devices, beverage, goods vending machines, cleaning of tiles, ceramics or natural stone.

### Environment friendly

Solvent based products are not biodegradable, hence create a problem while disposing.

The eco-compatible Klüberbio NA1 Z 0-001 AP is a water-based cleaner, it does not affect natural resources like ground water, and helps to reduce environmental pollution. Therefore, disposal of the product after use does not create any complications.



### Harmful effects of traditional industrial cleaners



Traditionally, decarbonising process involves using diesel, caustic soda and organic solvents, which has an adverse effect on environment as well as human health.

- Diesel fumes cause dizziness, drowsiness or headache even leading to lung cancer.
- The caustic soda dust or mist in the air ( $>2 \text{ mg/m}^3$ ) if inhaled can cause injury in the respiratory tract.
- Skin exposed to diesel becomes irritated, dry and even lead to eczema (dermatitis).
- High concentration of caustic soda affects the skin tissue by gradually penetrating the tissues and decomposing it.
- Vapors from organic solvents damages the respiratory tract affecting the nose, throat and lungs and may result in asthma.
- Solution containing more than 5% caustic soda is a strong corrosive substance, that can corrode metals such as aluminum, tin and zinc.
- Solvent-based products are non-biodegradable and pollute the environment.

## Applications



- Cleaning engine parts, gear boxes in workshops and garages
- Cleaning metal parts produced with process dirt
- Degreasing contaminated bearings during maintenance
- Cleaning machine parts and equipment during maintenance
- Cleaning food grade application area
- Can be used in the testing pit area (the use of solvents in test pits can lead to fire)
- Can be used in the areas of manual cleaning using bare hands

## Industries



- Rubber and plastic processing
- Maintenance and servicing
- Iron and steel industry
- Food processing technology
- Glass and foundry industry
- Paper and packaging industry
- Shipbuilding and marine technology
- Chemical industry
- Plant and machine tool engineering