

# INSTRUCTIONS FOR USE IN AGRICULTURAL MACHINE TRANSMISSIONS, GEARBOXES AND REAR AXLES

**CERAMIZER® is recommended for the reconditioning of and protection against heavy duty service, for regeneration of transmissions, gear boxes, rear axles as well as surfaces of metal parts which are subjected to friction.**

The proper use of Ceramizer® will result in improvements of vehicle's performance, reducing oil and fuel consumption, reducing vibration and noises, extending the gearbox's/reducer's life as well as the oil change intervals, stops and prevents gearbox pitting. Reconditioning of metal parts through the use of Ceramizer® takes place in normal operating conditions without the need to disassemble them. The metal-ceramic coating (which has unique properties) covers worn down surfaces, leading to restoration of ideal geometry of the surfaces that are subjected to friction.

Ceramizer® does not block oil channels, as its particles are extremely small in diameter, so they can be freely transferred to gearbox.

Ceramizer® does not affect oil at all. Its viscosity and composition remain unchanged. Oil is used as a means of delivering active nano particles into the internal parts of gear box/reducer prone to friction.

## INDICATIONS

1. Ceramizer® can be used with all types of gear oil and for all types of transmissions and reducers.
2. Smaller doses of Ceramizer® than recommended will not guarantee the expected results.
3. Increased doses do not cause any side effects, they only lengthen the process of cermet creation.
4. Durability of formed ceramic-metal coating depends on working conditions and may be up to 2 years (in case of continuous operation in normal working conditions) or up to 1650 working hours.
5. Ceramization of worn down surfaces can be repeated many times with Ceramizer®.
6. Ceramizer® can be used for any devices (including industrial devices) after consulting the Producer of Ceramizer®.

## DOSAGING

The below presented table specifies the QUANTITY OF CERAMIZERS (qty of dispensers) required for ceramization of surfaces subjected to friction.




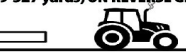


1 dose = one syringe with preparation of a net weight of 4,5 g.

Gearbox or Transmission Capacity (L).	10-20 L	20-30 L	30-40 L	>40 L
Operation: 1-4 thousand working hours	1 package (4 disp.)	2 packages (8 disp.)	3 packages (12 disp.)	4 packages (16 disp.)
Operation: 4-16 thousand working hours	2 packages (8 disp.)	3 packages (12 disp.)	4 packages (16 disp.)	5 packages (20 disp.)
Operation: 16-25 thousand working hours	3 packages (12 disp.)	4 packages (16 disp.)	5 packages (20 disp.)	6 packages (24 disp.)

### PACKAGE CONTAINS:

1. Four dispensers, each of 4.5g net mass.
2. The user manual.

## DIRECTIONS FOR USE FOR GEARBOXES, REAR AXLE:

1. **WARM UP THE GEARBOX BY OPERATING FEW km OR 0,5 mth**  

2. **TURN OFF THE ENGINE AND APPLY CERAMIZER**  

3. **DRIVE THE VEHICLE FOR A FEW km OR 0,5 mth**  

4. **DRIVE THE VEHICLE FOR 100 - 300 m (109-327 yards) ON REVERSE GEAR**  

5. **FOLLOWING MAKING THAT DISTANCE, DRIVE AT ANY SPEED**  

6. **DO NOT CHANGE OIL BEFORE MAKING THE FIRST 25 mth**  


1. Warm up rear axle and transmission oil – by operating for 10 minutes.
2. Turn off the engine.
3. Remove the gearbox filler plug or rear axle filler plug and apply the dispenser(s) content through the filler plug. In case of a filler with long neck, it is recommended to pour some oil through filler plug before application of Ceramizer®, then apply Ceramizer® and finally pour some oil again. This procedure ensures proper distribution of the additive in the engine lubrication system. In case of strainer filler, it is, recommended to mix Ceramizer® with some oil (e.g. 200ml), and then pour the mixture through oiler filler plug.
4. Put the filler plug back on.
5. Make the distance of a few km or operate for 0,5 hours.
6. Drive the vehicle for 200 meters / 218 yards on reverse gear.
7. The process of ceramic -metal coating formation follows during making the first 25 operating hours in normal working conditions. Do not change oil within this period.

## REDUCER APPLICATION INSTRUCTIONS:

1. Warm reducer oil– switch on the reducer, for at least of 30 min. Stop the reducer.
2. Remove the reducer filler plug and pour in the dispenser(s) content through the filler plug (according to the oil level marking).
3. Put the filler plug back on.
4. The process of ceramic -metal coating formation follows up to 60 working hours of reducer in normal working conditions. Do not change oil within this period.

## NOTES

1. If any Teflon or molybdenum compounds have been added to the oil before, we recommend exchanging this oil and cleaning the mechanism before applying Ceramizer®. Otherwise its effectiveness will be reduced and the process of cermet creation will be longer.
2. In case of any mechanical damages to the transmission e.g. broken cog, deep scratches or significant wear, they should be repaired before adding Ceramizer®.
3. Ceramizer® does not recondition any places where friction of rubber or plastic with metal parts occurs.
4. Do not change oil during the whole period of ceramization (1.5 thousand km or 25 working hours). Oil change is to be carried out according to maintenance schedule.
5. Apply along with fuel and engine Ceramizer® for optimal effect.

## WARNING

1. Do not use in automatic transmissions.
2. Do not use in the screw compressors.
3. Do not use in differentials containing Slips or LSD - these are mechanisms of increased internal friction.

## EFFECTIVENESS

Provides protection against wear and tear for minimum of 100 000 km /60 000 miles. Ceramizer® can be used again after this mileage.

## RESEARCH

This product is safe and produced in accordance with the EU (91/155/EEC) norm.

Effectiveness confirmed in tests.

Store at a temperature below +40 °C. If the storage temperature exceeds 40° C the product can sedimentate. In such case product should be shaken and cooled to a temperature below 40° C in order to make it ready to use.

Does not contain either molybdenum or Teflon.

Keep away from children.

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**PRODUCT MADE IN POLAND**