## **Roto Z Foodgrade**

# For oil-free Z rotary screw and tooth compressors

Roto Z Foodgrade is a semi-synthetic high quality lubricant, uniquely tailored to the specific requirements of the Atlas Copco Z-compressors and to the stringest requirements of the Food & Beverage, Farmaceutical and packing industry. Its special formulation yields top performance and maximum lifetime of all moving parts. Reliability is safeguarded and equipment availability is maximal.

Roto Z Foodgrade is cost-effective too: drain intervals are doubled in comparison to conventional Foodgrade certified lubricants combined with the best lubrication properties in order to resist the highest loads in all rotating parts and avoiding wear over its complete lifetime.



Our Z-compressor technology provides you class 0 (ISO 8573-1) compressed air quality and guarantees 0 contamination of your final products at all times. But because national and international regulations specify strict manufacturing standards regarding contamination risk management in this industry, also outside the compressor room, our Roto Z Foodgrade is developed to meet these stringent requirements, allowing for active Critical Control Points management (in an HACCP system) and providing increased customer confidence in the food products' safety.

The Roto Z Foodgrade will therefore give you this peace of mind throughout your entire company, as incidental contact (due to human mistake, spillage, mixing products, ...) with your process will not form any risk for product contamination at all, avoiding high costs due to production losses, product claims, brand damage, product recalls, etc.

	Features	Benefits
Excellent anti-wear properties	Roto Z Foodgrade contains proven anti-wear additives to be effective throughout the range of operating conditions.	This load carrying capacity is particularly important because oil-free compressors are driven by gears, requiring oils with anti-wear properties reducing gear teeth and bearing wear.
Thermal stability	Roto Z Foodgrade is thermal stable in severe conditions of load and temperature.	The oil has a high resistance to degradation and sludge formation.
Oxidation resistance	The good oxidation control minimizes the formation of aggressive corrosive acids, deposits and sludge.	This oxidation resistance will reduce your operating costs.
High viscosity index	Oil viscosity remains at a more stable level, even at high temperatures. This means lubricating efficiency is maintained under varying conditions.	Keeps working hard, whatever the conditions, even at high operating temperature. Increases bearing lifetime and reduces general danger in the oil circuit.
Incidental food contact approval	Roto Z Foodgrade is NSF International approved (Nonfood Compounds Registration), former USDA (United States Department of Agriculture) for H1 application.	Contributes to your HACCP system and provides your customer with a tangible proof of quality for the product you manufacture.
Specific manufacturing approvals	Kosher and Halal compliance.	Complies with most important international manufacturing requirements.



#### **Lubricant characteristics**

#### Appearance:

Clear liquid

Performance	Method	Unit	Value
Density at 15°C	ISO 3675	kg/dm³	0,860
Viscosity at 40°C	ASTM D 445	mm²/s	68
Viscosity index	ASTM D 2270		133
Foam stability	ASTM D 892	ml	0/0/0
Total acid number	ASTM D 974	mg KOH/g	0,18
Rust test	ASTM D 665B		Pass
Pour point	ASTM D 97	°C	-30

These characteristics are typical of current production. Whilst future production will conform to Atlas Copco's specification, variations in these characteristics may occur. Complies with ISO 6743 /3 /1A class L-DAH

### **ID** Card

Name	Roto Z Foodgrade
Oil type	Semi-synthetic based oil with tailored additive pack
Service intervals	All conditions 4 000 h < 55 kw 8 000 h > 55 kw Or 2 years (whichever comes first)
Environment	Ambient temperature range at 0°C to 50°C
Equipment	Atlas Copco oil-free screws & tooth
Compatibility	ZR, ZT, ZA, ZE compressors
Capacity (ID)	5   plastic can (1630 2057 05) 20   plastic can (1630 2057 20) 208   metal drum (1630 2057 29)
Approvals	NSF – H1, Halal and Kosher







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