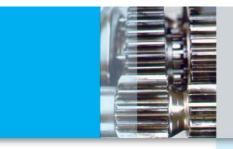
## Product Data Sheet







## **Product description**

Way Lubricant 68 in a proven performance machine tool slideway lubricant, designed to reduce friction and drag, stick-slip and machine tool chatter. It also offers good demulsification stability and coolant separation performance.

Way Lubricant 68 is formulated with highly refined mineral base oils, combined with EP additives, friction modifiers, anti-rust and corrosion additives and thickening agents.

### **Customer benefits**

- Proven friction modifiers reduce slideway friction, drag, stick-slip and machine tool chatter, improving workpiece surface finish
- Robust tackiness additives provide a tough, thick oil film that enables accurate table positioning
- Tough EP oil film protects surfaces under heavy load conditions, preventing slideway and guide scoring and wear
- Anti rust and corrosion additives increase equipment and hydraulic system service life
- Tackiness agents ensure lubricant stays in place, and will not be squeezed out, even on vertical slideways
- Demulsibility and adhesive properties prevent wash-out by other fluids, and provide rapid separation from coolants, preventing bacterial growth
- Suitable for combined hydraulic and slideway applications where an ISO 32 grade hydraulic oil is required

## **Applications**

### Machine tool slideways and guides:

- Combined slideway/machine tool hydraulic systems (ISO 32)
- Horizontal slideways (ISO 68)

## **Product highlights:**

- Tough oil film reduces friction, drag, stick-slip and chatter
- Prevents wear and corrosion
- Adhesive agents prevent squeeze-out, even on vertical slideways
- Resists fluid wash-out leading to bacterial growth
- Selected specification standards include:
- DIN 51524 part II
- Cincinnati Machine Specifications









- Light-to-moderate applications (ISO 68)
- Vertical slideways (ISO 220)
- More severe applications (ISO 220)
- Suitable for use with Bijur Automatic Lubricant delivery systems
- Other industrial applications requiring an adhesive, corrosion inhibited lubricant with EP properties

# Approvals and performance specifications

### Performance specifications

- Cincinnati Machine Specification P-53 Combination Hydraulic and Way Oil (ISO 32)
- Cincinnati Machine Specification P-47 Heavy-Medium Way Oil (ISO 68)
- Cincinnati Machine Specification P-50 Heavy Way Oil (ISO 220)
- As an hydraulic oil they meet the requirements of DIN 51524 part II.

### Service considerations

Machine tool carriages typically operate on slideways under high loads and slow speeds. The carriages must be able to start in motion quickly and smoothly and then continue in motion at a constant speed. Excessive frictional resistance at start-up compared to friction resistance while in motion can cause undesirable erratic or jumpy motion, which is commonly referred to as machine tool chatter or stick-slip.

Effective way oils must have a low stick-slip value (static coefficient of friction to kinematic coefficient of friction ratio) to prevent stick-slip problems. Way oils must also possess tackiness to prevent run-off of the lubricant, particularly on vertical ways. Extreme pressure properties are also required to prevent scoring of slideways and guides.







continued

## Typical test data

WAY LUBRICANT			
TEST	TEST METHODS	RESULTS	
Viscosity Grade		68	220
Product Code		540419	540420
Kinematic Viscosity, 40°C, mm²/s	ASTM D445	68	220
Kinematics Viscosity, 100°C, mm²/s	ASTM D445	8.42	19.4
Viscosity Index	ASTM D2270	110	105
Flash Point COC, °C	ASTM D92	215	234
Pour Point, °C	ASTM D97	-27	-15

The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved. This supersedes all previous editions and information contained in them.

<u>Disclaimer</u> Chevron accepts no liability for any loss or damage suffered as a result of using this product for any application other than applications specifically stated in any Product Data Sheet's.

Health, safety, storage and environmental Based on current available information, this product is not expected to produce adverse effects on health when used for the intended application and in accordance with the recommendations provided in the Material Safety Data Sheet (MSDS). MSDS's are available upon request through your local sales office, or via the Internet. This product should not be used for purposes other than its intended use. When disposing of used product, take care to protect the environment and follow local legislation.

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