



Product Data

Castrol Tribol[®] 290

Conveyor Lubricant

Castrol Tribol 290 Conveyor Lubricant is a synthetic fluid for lubricating conveyor chains and open trolley wheel bearings in the automotive and metal decorating industries. 290 is designed for service including cathodic electrodeposition (e-coat), painting, and high temperature drying and curing.

The following performance characteristics are emphasized in the formulation of **Castrol Tribol 290 Conveyor Lubricant**.

- Compatibility with most water-based paints and coatings including water-based cathodic dip coatings - to prevent cratering and surface disruption.
- ·Low volatility - to retain fluid-film in ovens and reduce the need for frequent reapplications.
- ·Excellent wetting and adhesive properties - for fast, thorough penetration to load zones and minimal tendency to drip.
- ·Antiwear and extreme pressure (EP) characteristics - to significantly extend the useful life of the chain.

Castrol Tribol 290 Conveyor Lubricant is part of Castrol Performance Lubricants' Eco-Solutions™ product offering. Formulated to address environmental concerns, it is free of lead, chlorinated solvents, and barium.

Description

Castrol Tribol 290 Conveyor Lubricant is a blend of select, water soluble, synthetic fluids known for their natural lubricating ability. The base fluids are selected for favorable volatility characteristics and chemical and thermal stability (very high viscosity index).

An advanced additive system provides additional antiwear and extreme pressure characteristics under boundary conditions for protection from surging loads and very high oven temperatures. Inhibitors further enhance the naturally high resistance to oxidation of the synthetic base.

Castrol Tribol 290 Conveyor Lubricant is a clear fluid with a light yellow tint. At high temperatures, 290 tends to volatilize slowly rather than "cook" to carbonaceous debris which could contaminate coatings, soil finished goods, or even present a potential fire hazard.

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Applications

Use **Castrol Tribol 290 Conveyor Lubricant** to lubricate any chain and open trolley bearings where compatibility with water-based paints and coatings is critical. **Castrol Tribol 290 Conveyor Lubricant** is usually recommended for oven temperatures from 150°C (302°F) to 220°C (428°F). At elevated temperatures, reapply more frequently rather than increase the amount applied.

Castrol Tribol 290 Conveyor Lubricant is most suitable for automotive production lines, which usually include cathodic electrodeposition, water-based painting (coating), then drying and curing in an oven. Typically these operations include immersing parts into baths from moving overhead conveyors. Contamination from dripping lubricant is always a threat to production and process baths. Should **Castrol Tribol 290 Conveyor Lubricant** ever drip into a water base process bath, it would dissolve and disperse preventing accumulation and the disruption of coatings or electrodepositions.

Advantages

Compatibility with the e-coat process and most water-based paints eliminates lubricant-related "fish eyes" and craters, reducing rework and refinishing costs.

Low volatility allows reduced application/consumption, and reduces the potential for contamination from drip or fling-off, and the costs relating to soiled merchandise.

Reduction in friction and wear relate to cost savings in power consumption as well as conveyor downtime, repair and replacement.

Notes

Castrol Tribol 290 Conveyor Lubricant is **NOT** compatible with mineral (petroleum) base lubricants.

When changing over to **Castrol Tribol 290 Conveyor Lubricant** from **ANY** other lubricant, clean automatic application systems thoroughly before adjusting delivery amounts and patterns.

Phosphatizing and acid baths generally produce a highly corrosive atmosphere, which can cause corrosion of conveyor hardware.

Where corrosion is already in progress, usually extraordinary means are required to suppress it. Equipment not already rusting is well protected by



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Castrol Tribol 290 Conveyor Lubricant. Corroding hardware should be pre-cleaned and applications of any lubricant should not be minimized.

For specific terms, conditions, warranty and availability, refer to Castrol Performance Lubricants' Price List in effect at time of purchase.

Typical Characteristics

	290/22	290/150	290/220
Specific Gravity, ASTM D 1298, @ 15.6°C/60°F	1.02	1.05	1.05
ISO Viscosity Grade, ASTM D 2422	22	150	220
Viscosity, ASTM D 445, D 2161			
@40°C,cSt	24	151	229
@100°C,cSt	5.3	27	39
@200°C,cSt	1.6	6.0	8.1
@100°F,cSt/SUS	26/124	164/760	250/1158
@210°F,cSt/SUS	5.4/44	28/133	40/188
@400°F,cSt/SUS	1.5/31	6/46	8/53
Viscosity Index, ASTM D 2270	163	214	225
Flash Point, ASTM D 92, COC, °C/°F	210/410	299/570	299/570
Fire Point, ASTM D 92, COC, °C/°F	227/440	316/600	316/600
Pour Point, ASTM D 97, °C/°F	-46/-50	-32/-25	-30/-22
Rust Test, ASTM D 665:			
Procedure A (Distilled Water)	Pass	Pass	Pass
Four Ball Wear Test (40 kg, 75°C/167°F, 1800 rpm, 1 hr)			
Scar Diameter, mm	0.39	0.38	0.36
Falex Wear Test, ASTM D 2670, wear teeth	5	3	3
Thin Film Evaporation Loss @ 220°C/425°F			
Weight percent lost, 1.0 hours	6	3	4
Weight percent lost, 1.5 hours	15	9	8

Subject to usual manufacturing tolerances

All reasonable care has been taken to ensure that this information is accurate as of the date of printing. Nevertheless, such information may be affected by changes in the blend formulation occurring subsequent to the date of printing. Material Safety Data Sheets are available for all Castrol products. The MSDS must be consulted for appropriate information regarding storage, safe handling and disposal of a product.