



# Shell VSI 8235

• *Reliable Protection*

## Corrosion inhibitor

Shell VSI 8235 is an oil soluble concentrate that has the ability to protect steel surfaces which are above the normal oil level in a system e.g. the vapour spaces in an oil storage tank or the oil reservoir in a circulation system.

## DESIGNED TO MEET CHALLENGES

### Performance, Features & Benefits

#### • Equipment protection

Shell VSI 8235 contains polar materials which are both oil soluble and also volatile. Thus, as Shell VSI 8235 is in circulation, the vapour spaces in a system are continuously kept filled with the VSI vapour which is formed by these inhibitors and this vapour continuously blankets metal surfaces to protect them from corrosion.

- Machine tool housings where the machines may be idle over a weekend or for even longer periods of time.
- Steam turbine lubrication systems where corrosion of oil gravity tanks or oil storage tank walls and overheads is occurring.
- Any machinery that is actually idle or in intermittent use and which is therefore susceptible to rusting because the oil in use gradually drains down from internal surfaces.
- Contact with lead and lead alloys should be avoided unless the alloys have been tested for suitability under actual operating conditions

### Main Applications

- Shell VSI 8235 is recommended for use in all enclosed oil lubrication systems where rusting is likely to occur because of the presence of steam condensate or atmospheric moisture in the system.
- Oil lubricated rolling bearing and gear housings, reservoirs, oil piping, and similar circulation system components.

### Specifications, Approvals & Recommendations

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Help Desk.

### Typical Physical Characteristics

Properties			Method	Shell VSI 8235
Density	@15°C	kg/L	ASTM D4052 / D1298	0.876
Flash Point		°C	ASTM D92	130
Viscosity	@40°C	mm <sup>2</sup> /s	ASTM D445	16.5
TAN		mg KOH/g	ASTM D664	20
TBN		mg KOH/g	ASTM D2896	30

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

### Health, Safety & Environment

#### • Health and Safety

Shell VSI 8235 is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from your Shell representative.

- **Protect the Environment**

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

### Additional Information

- **Dosage Instructions**

Shell VSI 8235 is recommended for use at 2% volume solution and is added to the existing oil already in the equipment. It should not be used at higher concentrations as this may result in equipment damage.

- Shell VSI 8235 should be added to the lubricant contained in the sump or in the oil tank a few hours before the equipment is stopped. For new pieces of equipment which will be stored after trial, the lubricant/Shell VSI 8235 mixture could be totally or partially drained out after the trial run provided however that a small quantity of mixture is kept in the sump. If the oil temperature remains lower than 25°C, the distance between the upper internal surfaces to be protected and the oil level in the machine must be less than two metres.
- The anti-corrosion performance of the lubricant/Shell VSI 8235 mixture and the durability of the protection provided are dependent on the degree of ventilation of the system and the oil temperature. The performance can be improved by raising the oil temperature before stopping the equipment and by sealing the vents of the machine concerned.
- The internal protection of large oil tanks will be improved by brushing or spraying the surfaces to be protected with the lubricant/Shell VSI 8235 mixture.
- Shell VSI 8235 has no detrimental effects on equipment or system components during storage. However, it is preferred that the mixture not be used as the service lubricant when the equipment is returned to or put in operation.
- VSI 8235 is not recommended for use in internal combustion engines.

- **Advice**

Advice on applications not covered here may be obtained from your Shell representative.