



# Shell Gravex Oil 913

## Naphthenic process oil

Shell Gravex Oils are a range of severely hydrotreated naphthenic process oils with good solvency properties. They are general purpose process oils for use for example as extender or carrier fluids. Gravex 913 is suitable for carbonless copy paper matching AEMCP requirements.

### DESIGNED TO MEET CHALLENGES

#### Specifications, Approvals & Recommendations

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk, or the OEM Approvals website.

#### Typical Physical Characteristics

| Properties                               |        |                    | Method                    | Shell Gravex Oil 913 |
|--|--------|--------------------|---------------------------|----------------------|
| Colour (ASTM)                            |        |                    | ASTM D1500                | L0.5                 |
| Density                                  | @15°C  | kg/m <sup>3</sup>  | ISO 12185                 | 892                  |
| Refractive Index                         | @20°C  |                    | ASTM D1218                | 1.488                |
| Flashpoint (COC)                         |        | °C                 | ISO 2592                  | 150                  |
| Pour Point                               |        | °C                 | ISO 3016                  | <-60                 |
| Kinematic Viscosity                      | @20°C  | mm <sup>2</sup> /s | ISO 3104                  | 19                   |
| Kinematic Viscosity                      | @40°C  | mm <sup>2</sup> /s | ISO 3104                  | 8.8                  |
| Kinematic Viscosity                      | @100°C | mm <sup>2</sup> /s | ISO 3104                  | 2.1                  |
| Sulphur (X-Ray)                          |        | % m/m              | ISO 14596                 | 0.1                  |
| Carbon Type Distribution : C/A (S-corr.) |        | %                  | DIN 51378/ASTM D2140 mod. | 11                   |
| Carbon Type Distribution : C/N (S-corr.) |        | %                  | DIN 51378/ASTM D2140 mod. | 44                   |
| Carbon Type Distribution : C/P (S-corr.) |        | %                  | DIN 51378/ASTM D2140 mod. | 45                   |
| Refractive Intercept (RI)                |        |                    | DIN 51378                 | 1.0440               |
| Viscosity Gravity Constant (VGC)         |        |                    | DIN 51378                 | 0.865                |
| Aniline Point                            |        | °C                 | ISO 2977                  | 67                   |
| Clay Gel Analysis : Polar Components     |        | % m/m              | ASTM D2007                | 0.1                  |
| Clay Gel Analysis : Aromatic Components  |        | % m/m              | ASTM D2007                | 30.6                 |
| Clay Gel Analysis : Saturated Components |        | % m/m              | ASTM D2007                | 69.3                 |
| Evaporation Loss (22 hrs)                | @107°C | % m/m              | ASTM D972                 | 28                   |
| Noack Volatility (1 hr)                  | @250°C | % m/m              | ASTM D5800                | -                    |
| PCA Content (DMSO Method)                |        | % m/m              | IP 346                    | <3.0                 |

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 Gravex Oil 913 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 <http://www.epc.shell.com/>

### ■ Protect the Environment

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

## Additional Information

### ■ Advice

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