

### CGM CIGIEMME S.p.A.



Controlli Non Distruttivi - Non Destructive Testing

Product Code 02098010 Ref. no. K41



### **KEROSENOIL K 41**

### PRODUCT DESCRIPTION

Kerosenoil K 41 is a refined petroleum distillate for the suspension of magnetic particles by the wet method.

Kerosenoil K 41 is a product with low sulphur and halogen content according to standards.

- It protects inspection equipment from rust and corrosion and extends its service life.
- It is ideal for:
  - Equipment and systems even if little used.
  - When water may pose a danger to the component being inspected.

### **COMPOSITION**

Super-refined petroleum distillate consisting of high-boiling aliphatic solvents with a high flash point and low sulphur, halogen and aromatic hydrocarbon content.

N.B.: As with all CGM products, Kerosenoil K 41 is tightly controlled to ensure batch uniformity, optimal process verification and control reliability.

### **SPECIFICATIONS**

- Suitable for all inspections with the full range of CGM wet magnetic particles.
- Excellent mobility of particles, as it keeps them evenly dispersed in the suspension.
- Slow evaporation resulting in longer magnetic suspension life.
- Excellent wetting and surface coverage.
- Low toxicity and reduced skin irritation effect.
- High flash point.
- High temperature stability.
- Minimal odour to improve the working environment.

### PACKAGING TYPE

- 10 L cans
- 200 L metal drums

### INSTRUCTIONS FOR USE

**TIP:** always operate according to a procedure authorised by a 3<sup>rd</sup> level in Magnetic Particle Inspection.

- Ensure that the part to be inspected is clean to avoid false indications and contamination of the magnetic suspension.
- Add the required amount of magnetic powder to achieve the expected concentration value.
- Check the concentration value before use.
- During use, keep the magnetic suspension stirring to ensure bath uniformity.
- With use, the dust content of the magnetic suspension tends to decrease and it is therefore necessary to check the strength of the bath daily using the sedimentation glass tube or the reference block, as stipulated in the inspection procedure.





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- When the concentration value approaches the lower limit, it is possible to reinforce the magnetic suspension by adding concentrated powder or paste.
- After a long period of use, the suspension must be replaced. Refer to the inspection procedure to be applied.
- When the bath appears contaminated, it must be replaced.
- After the inspection and before final cleaning, it is advisable to demagnetise the inspected part to the residual magnetisation value specified in the inspection procedure. This also ensures easier removal of residual magnetic powder particles.

#### PROPERTIES AND PRODUCT COMPARISON

	К 41	К 42
Colour	Clear, colourless	Clear, colourless
Odour	Light and distinctive	Light and distinctive
APHA colour	<10	<10
Density at 20° EN ISO 12185	0.84 g/cm³	0.83 g/cm³
Viscosity at 40°C ASTM D 445	2.687 mm²/s	2.937 mm²/s
Flash point ASTM D 93	>100°C (type 1 – ASTM 2641)	>110°C (type 1 – ASTM 2641)
Halogens	<200 ppm	<200 ppm
Sulphur	<200 ppm	<200 ppm

Typical values.

### **COMPLIANCE WITH STANDARDS**

- EN ISO 9934-2
- ASTM E709
- AMS 2641
- ASTM E1444

### **HEALTH AND SAFETY**

Read all health and safety information before using this product. This information can be found in the Safety Data Sheet, available on request.





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### RECOMMENDATIONS FOR THE USER

NDT method	Magnetic Particle Inspection, wet method
Shelf life	3 years at a temperature between 5°C and 45°C
Usage temperature	From -5°C to +80°C
Magnetic Particles	K35, K40, K150, K755, K31-73, PKD31-73/50, PKD 35/50, PKD 755/50
Preliminary cleaning	Velnet/Solnet
UV lamp	Labino
Recommended accessories according to standards ASTM E1444 ASTM E709 EN ISO 9934-2	Sedimentation glass tube – Magnetic stripe card type 2000 – Reference block type 1 (MTU) – Reference block type 2 – Flexible laminated strips – Tool Steel Ring type AS 5282 and type Ketos 01 – Octagonal plate

<sup>\*</sup> Complies with AMS 2641 up to a minimum temperature of 10°C.

Rev. 03 – 29/05/2024

