

**WATER GLASS**

Date of issue: 01 Sept

Modification: 05

Date of validity: 10 Dec 2012

**1. PURPOSE OF USE**

It is used as a binder of sand mixture for production of cores according to the CO<sub>2</sub> procedure.

**2. GENERAL QUALITY REQUIREMENTS**

Conformity with the manufacturer's catalogue.

**3. PROPERTIES OF MATERIAL**

It must provide for good strength and persistence of cores after flushing with CO<sub>2</sub>. It must be viscose with certain module (from 2.4 – 2.6) that shows a weight ratio of SiO<sub>2</sub> and Na<sub>2</sub>O shares.

**4. PACKAGING, PACKING AND TRANSPORT**

Water glass should be in IBC containers or steel drums with metallic rings with manufacturer's designation, name, date of production and net weight.

**5. WARRANTY OF QUALITY**

For each shipment, the quality assurance certificate is required regarding the:

- viscosity
- % Na<sub>2</sub>O
- % SiO<sub>2</sub>
- water glass module (SiO<sub>2</sub>/Na<sub>2</sub>O)

**6. MANNER OF ACCEPTANCE**

Water glass will be accepted by the acceptance control of LIVAR.

**7. CONTROL PROCEDURE**

Control procedure is sampled for water glass module, namely for each crate. In case of any dispute regarding quality, chemical analyses are conducted by external institutions.

**8. MANNER OF MEASUREMENT**

QUALITY CHARACTERISTICS, VALUE, MANNER OF MEASUREMENT  
NAME: WATER GLASS - densely

QUALITY CHARACTERISTICS	VALUE	MANNER OF VERIFICATION
Module	2,45 -2.60	Certificate and chemical analysis
Density	1.50-1.54 g/cm <sup>3</sup>	Certificate, density analysis
SiO <sub>2</sub> content	27 - 28 %	Certificate and chemical analysis
Na <sub>2</sub> O content	11 - 12 %	Certificate and chemical analysis



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## MATERIAL QUALITY SPECIFICATION

SPKM - 028

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NAME: WATER GLASS - rarely

QUALITY CHARACTERISTICS	VALUE	MANNER OF VERIFICATION
Module	2,30 -2.50	Certificate and chemical analysis
Density	1.48-1.50 g/cm <sup>3</sup>	Certificate, density analysis
SiO <sub>2</sub> content	26 - 27 %	Certificate and chemical analysis
Na <sub>2</sub> O content	11 - 12 %	Certificate and chemical analysis