Moulded Components Semi-Rigid Polyolefin (15)

Scope

This Quality Assurance Specification establishes the quality standard for moulded components, manufactured from cross-linked, electrically-insulating, semi-rigid polyolefin material, whose dimensions will reduce to a pre-determined size upon the application of heat.

Requirements

1. Composition and Appearance

2.2 Colour

The moulded components shall be homogeneous and free from pinholes, bubbles, cracks and inclusions.

The components shall be black, unless otherwise specified.

The components shall meet all the requirements contained in Table 1.
cross-thinking. The number of moulded components specified, the dimensions, approximate of dimensions to be expected from the same degree of compounding and subjected to the same degree of compounding will be determined from the same degree of compounding. The pieces of qualification test samples shall consist of six moulded quality control test samples.

Sampling instructions:

4. Sample the strength and ultimate elongation. Each batch of compound, and shall consist of the following:

production routine must be carried out on every product. In addition to the quality control test, there shall be one qualification test. In addition to all tests listed in this product, and when a change of formulation takes place, components submitted for qualification as a satisfactory sample class I qualification test are those performed on

class I qualification

class I qualification test

quality assurance provisions
5.2 Specimen Control Drawing (SCD).

5.1 Dimensions shall be in accordance with the appropriate dimensions.

Temperature and allowing to cool in air to ambient minutes and recorded by constant temperature in an oven at 150 ± 3°C for 10 minutes or on a moulded component of suitable size, 0.3-mm or on a moulded test sheet of material 150mm x 150mm x 2.0 unless otherwise specified, tests shall be carried out unless otherwise specified, these samples, test samples, test samples, test samples.

TEST PROCEDURES

5.2 of moulding compound.

5.1 A number manufactured at any one time from the same batch that quantity of moulded components of the same part at one time. A batch of moulded components is deemed to be that quantity of moulded material blended to selected at random.

Production Routine Test Samples shall consist of

4.2. Quality Assurance Specification RKG716 - ISSUE ONE
at 100 ± 2°C for 1000 ± 10 hours in a fan-assisted air circulating oven.

or B, Grieve tensile test specimens shall be conditioned at

120 ± 3°C for 168 ± 2 hours in a fan-assisted air

circulating oven.

A, Grieve tensile test specimen shall be conditioned at

an appropriate atmosphere or B, shall apply, either
depending upon the requirements of the inspection.

The test method shall be as specified in ISO 1160.

5.6 Heat Aging

examined.

oven and cooled to room temperature and visually

after conditioning the specimens shall be taken from the

conditioning in a fan-assisted air circulating oven.

test requirements shall be 48 ± 1.5h at 150 ± 5°C

The test method shall be as specified in ASTM D2772. The

5.5 Heat Shock

R183.

The test method shall be as specified in Method A of ISO

5.4 Specific Gravity

per minute.

shall be 100mm and the rate of jaw separation 10 ± 1mm

temperature of 23 ± 2°C. The initial jaw separation

ASTM D609. The test shall be carried out at a

The test method shall be as specified in Method A of

5.3 Secant Modulus

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be used where possible.
ISO 692. Three dielectric specimens of diameter 25 ± 1 mm shall
The test method shall be as specified in Procedure A of
Water Absorption

(Short-term test).
The test method shall be as specified in IRC 243.

Dielectric Strength

Less than two seconds.
The grips shall be moved to a position 25 mm apart in
a cold chamber. While still at the low temperature,
device, shall be conditioned for 48 ± 15 at 40 ± 2 C
specimens in a loop position. The specimens and bending
parameter grips set 65 mm apart (except for the
pasting two 25 mm into the bending device, (compressing two
ends of five strip specimens 150 mm x 6 mm shall be
The test method shall be as specified in ASTM D2971.

Low Temperature Flexibility

Strengthen and ultimate elongation in accordance with 5.2.
oven, cooled to room temperature and tested for tensile
After conditioning the samples shall be removed from the

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5.11

Puncture Resistance

Antitreadse (Ethylene Glycol)

Cleaning Fluid T56850-017

Preliminary Fluid P54

Gasoline Automotive P46

30 ± 5 min at 23 ± 2°C in the fluids listed below.

In addition samples shall also be exposed for:

Hydraulic fluid J7103

Engine oil SAE 20-50

Transmission Fluid SAE 85-90

Each of the test fluids listed below:

samples shall be exposed for 24 ± 2hrs at 23 ± 2°C to

specimen shall be determined as in clause 5.2. The

tensile strength and ultimate elongation of each

highly wraped and air dried at 23 ± 2°C for 45 ± 15min.

After conditioning the specimen shall be removed,

shall be not less than 20 times that of the specimen.

specified time stated. The volume of the fluids

be completely immersed in each of the fluids listed

tensile test specimens prepared as in clause 5.2 shall

The test method shall be as specified in ISO 1677. The

Fluid Resistance

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Materials, Incorporating and Associated Products

Methods of Test

Uncertainties, Rubbers - Resistance to Plutonium Plastics

Gravity or Plastics Extruding Cylinders Density and Relative Density (Specific
Densities) Method for Determining the
Plastics to Plastics - Resistance of Resistance of
Vacuumized Rubbers - Accelerated Aging Absorption

Plastics - Determination of Vacuumized Rubber
Properties of Vacuumized Rubber

Determination of Resistance Sheeting, Non-Slurry, Sheeting
Strength of Solid Insulating Materials at
Recommended Methods of Test for Electrical
Test Sheeting, Heat-Shrinkable Tubing

Tests, Methods of Test, Plastics - Resistance of

ASTM D682

Recommendations

RELATED DOCUMENTS

Contract or Order

Information shall be supplied as specified in the
quantity, part number and batch number. Additional
Each package shall bear an identification label showing

Marking


6.2

Product

Packaging shall be in accordance with good commercial

Packaging

6.1

PREPARATION FOR DELIVERY

QUALITY ASSURANCE SPECIFICATION RKG716 - ISSUE ONE
200% 0 10 MPA 200% 10 MPA

Ultimate Biaxial Tensile Strength
Puncture Resistance
Ultimate Biaxial Tensile Strength

Antistatic (ethylene glycol)
Cleaning Fluid 7L6G50-017
Diesel Fluid 549
Gasoline Automotive 546
Hydraulic Fluid 7L703
Engine Oil 8L 20-50
Transmission Fluid SAP 85-90

Plastic Resistance to:

Water Absorption
Chemical
Dielectric Strength

Electrical

Low Temperature Flexibility
Ultimate Biaxial Tensile Strength
Heat Aging

Heat Shock

Specific Gravity

2% Secant Modulus

Ultimate Stretcher Strain

% Tensile Strength

Dimensional
Physical

Property

REQUIREMENT

REQUIREMENTS

TABLE 1

QUALITY ASSURANCE SPECIFICATION REG716 - ISSUE ONE