# **GROUPE KUSTERS**

FLAME RETARDANT & TECHNICAL NETS



# Groupe Kusters Polyéthylène HDPE Flame Retardant NETS

## 1. Construction

Our nets are manufactured from 12/6 HDPE ultra-violet stabilized twine.

The twine is made up from 630 denier (0.30mm thick) monofilament HDPE it is the twisted x 2 then x 3 strands to make the finished twine that is approximately 1,3 mm in diameter.

The breaking force of the twine is 14kg to ISO1805. The twine is then manufactured into sheet netting by the use of a knotted net loom, after this process the netting is placed in our heat stabilizing setting machine, at this stage the knots are pulled under pressure of about 5 tons and set at a temperature of 95 c for 3 minutes, this process ensures that the knots and mesh size is to the quality that we require All the netting is manufactured within the European union.

Standard mesh sizes that we produce are 19mm, 40mm, 76mm (We can if required make any other mesh size). The nets made from the sheet netting can be made into any length, width, or shape required. Colors available in the normal HDPE are black, stone and translucent. Fire retardant black (Dark Grey) with green marker.

Weight per square meter

19 mm mesh ~ 0.074kg square meter 38 mm mesh ~ 0.026kg square meter 76 mm mesh ~ 0.012kg square meter

## 2. Thermal Properties

**Softening Point** HDPE softens at 120 c **Effect of High Temperature** 

Melts at 130 c

#### **Effect of Low Temperature**

HDPE retains its flexibility at very low temperature and does not become rigid under freezing conditions.

Flammability on the normal HDPE

Burns slowly in air, fine filaments tend to melt and drop away before propagating a flame.

#### 3. Flame Retardant

Tested for flammability to BS 5867 part 2 1980 Type B without any form of cleansing or wetting procedure prior to testing.

#### 4. Chemical Properties

HDPE, being a paraffin hydrocarbon is inherently chemically inert and highly resistant to a wide range of chemicals at ordinary temperatures. HDPE fibers have a high resistance to acids and alkalis at all concentrations. They are attacked by nitric acid. They are insoluble in most common organic solvents at room temperature.

#### **5. Electrical Properties**

HDPE is an outstanding electrical insulator, especially to high frequency currents.

#### 6. Insects and Micro-organisms

The fibers are not digested by insects and are completely resistant to bacteria, mildew and other microorganisms. This makes them virtually rot proof.