



Plastic Products

EVALUATION OF FINISHED PLASTIC PRODUCTS

KEY WORDS

PLASTIC PRODUCT
EVALUATION,
QUALITY CONTROL,
ADDITIVE ANALYSIS

DESCRIPTION

Analysis of lacquers, paints and plastic coatings applied on metallic surfaces and pipes.

Quality control of plastic pipes, rubber seals of valves and flanges.

Characterization of plastic scrap for recycling.

Analysis of additives.

Methodology:

Infrared spectroscopy with Fourier transform (FTIR and micro-FTIR).

Attenuated total reflectance (ATR)

Differential scanning calorimetry (DSC)

High pressure liquid chromatography (HPLC)

Thermogravimetric analysis (TGA) coupled with IR spectroscopy of gases (TGA/IR)

Gas chromatography coupled with mass spectroscopy (GC/MS).

Elemental analysis by ICP/OES, ICP/AES

X-ray analysis by diffractometry (XRD, WAXS) and X-ray fluorescence spectrometry (FRX)

Optical (OM), electron (SEM, TEM) and atomic force microscopy (AFM)

APPLICATIONS

Finished plastic product testing

Coating and paint analysis

Pipe quality control

Rubber seal evaluation

Additive analysis

Recycling material assessment

Surface coating characterization

Industrial product validation

Performance evaluation

Material compliance testing

Production troubleshooting

Degradation assessment

Supplier material verification

CONTACT US

ott@plapiqui.edu.ar
Universidad Nacional del Sur