



why impact solutions?

Impact Solutions has over 40 years of experience in polymer and materials testing and development. Based in Grangemouth, UK, we are a UKAS and ISO17025 accredited test laboratory and technical consultancy. We use our knowledge and expertise to help you improve product quality, analyse failures and ultimately increase profits.

why choose impact solutions?

- ✓ expertise from reactor to recycle
- ✓ ISO17025 UKAS accredited test laboratory
- ✓ 40+ years of polymer research & innovation
- ✓ quality customer service guaranteed
- ✓ unique service from proven technical experts
- ✓ custom test and development solutions designed to suit your needs
- ✓ in-house testing ensuring quality, speed & accuracy
- ✓ environmental (-90C to 300C) & full model liquid capabilities
- ✓ global client base - multinationals to SME's

industries include:

automotive, chemical, construction
packaging, pipe
polymer distribution, oil & gas
recycling, tank & textiles



problem solving & failure analysis experts

- ✓ bespoke solutions designed to solve your problems
- ✓ product development expertise
- ✓ small scale compounding facilities
- ✓ performance testing and evaluation
- ✓ R&D project leader developing new technologies throughout the plastics industry



just some of our testing areas



UKAS accredited tests:

Physical Tests

Melt flow rate	BS EN ISO 1133:2005
Density	BS EN ISO 1183-2:2004
Resistance to UV ageing	BS EN ISO 4892-1:2001 BS EN ISO 4892-2:2006
Absorption of liquid chemicals	BS EN ISO 13274:2013

Mechanical Tests

Tensile strength, elongation	BS EN ISO 527-1:1996 BS EN ISO 527-2:1996 BS EN ISO 527-3:1996
Environmental stress cracking of PE Compatibility tests	BS ISO 16770:2004 BS EN ISO 13274:2013 BS EN ISO 23667:2007 Annex B.4.1 (Method A)
Resistance to absorption	Annex B.4.2.4 (Method B3)
Resistance to environmental stress cracking	Annex B.4.3.3 (Method C1)
Resistance to molecular degradation	

Pipes, ducts and fittings

Hydraulic pressure testing	ISO 1167-1:2006
Notched pipe testing of polyolefin pipes	ISO 13479:1997
Long-term hydrostatic strength	BS EN ISO 9080:2003

Tanks & Bunds

Performance Tests , Tanks and Bunds	EN 13341:2008
Capacity, Visual inspection	OFS T100:Iss 06:July 2008
Mass, Wall thickness, Impact resistance	BS EN 13575:2012
Elongation and deformation	EN 13341:2005
Pressure resistance, Leak tightness	Annexes A.1 and A.2
Overflow, Materials, Density	BS EN 13575:2004
Melt flow rate, Tensile strength	Annex B
Elongation, Resistance to oil	
Resistance against chemicals & Resistance to weathering	

Packaging for transport of dangerous goods (UN Chapter 6.1 Packagings)

Boxes:	Fibreboard	(Drop tests, Stack tests
Drums:	Metals, Plastics	Leakproofness tests &
Jerricans:	Metals, Plastics	Internal pressure (hydraulic))
Composite packaging:	Plastic receptacle	

A few of our non-UKAS tests...

We offer complete be-spoke testing packages designed to uniquely meet your needs.

Abrasion	various standards
Bell telephone test	ISO 178
Carbon black	ISO 6964/18553
EF weld testing	WIS 4-32-08
Elongation at break	ISO 6259-1,3
Environmental chamber controlled testing	(-90C to +300C)
Extreme temperatures	
Flexural/Modulus	
FTIR & DSC analysis	
Full model liquid testing	(chemical conditioning)
Integrity of structure	EN 12201-2:2011
Impact (Charpy, Izod)	ISO 179
Long term creep	
Molecular characterisation	
NATO Packaging standard testing	
OIT/OOT	
Poissons ratio	
Rheology	

We specialise in providing be-spoke test solutions for our clients. Be-spoke solutions may combine a variety of different tests, or the creation of entirely new test solutions to suit the circumstances.