# The

# recycled plastic performance.

THE NUMBERS DON'T LIE.



# All ADS pipe is created equal.

Contrary to popular belief, ADS recycled material performs equally to virgin and undergoes the same rigorous ASTM testing.

# Forget the fluff. Let's focus on the data.

Unlike traditional straight-stick drainage pipe, the coiled agricultural tile is subjected to extreme physical conditions in each of the handling, installation, and installed requirements. ADS recycled formulations are built for strength, stiffness, and toughness.

**ADS Recycled Actual** 

**Industry Requirement** 

## Flexural Modulus (PSI)

Indicates the physical strength of the plastic in regards to flexing/bending, directly proportional to the ring stiffness of pipe. In layman's terms, it'll pass the old stomp-and-boot test.

requirement

> 40,000

## Tensile Strength (PSI)

Ensures profile design and material performance are aligned to eliminate cracking failures in the field. You don't handle pipe like you handle your baby; be as firm as you have to.

requirement

> 3,000

## Pipe Stiffness (PII)

Showcases the pipe's ability to resist bending in-ring stiffness direction after installation. So, pile it on and sleep easy — because these products can withstand the heaviest of loads.

+39%

More than minimum

≥ 30 PII

5% Stiffness

## Always within range.

Balancing material and mechanical properties are crucial for pipe performance, and specific ranges are set to determine its versatility. We call it the 'Goldilocks' test because it can't be too high or too low — it has to be just right.

## Density (G/CM3)

Indicates the type of High-Density Polyethylene (HDPE) used and ensures a balance of strength, stiffness, and toughness. Lower density can result in inadequate strength for the end application.

100% within range 0.940 0.955

#### Melt Index (G/10MIN)

Denotes the processing capability and molecular weight in HDPE. If it's is too low, it can result in reduced stress crack resistance or brittleness. If it's too high, there will be difficulty in processing and poor plastic material distribution in the pipe wall.



### Inside Diameter (IN)

Confirms hydraulic design expectations are met.



# Passes with flying colors.

For some physical property standards, a passing grade is a critical indicator of pipe performance. To sum it up, we study for all our tests, and it clearly shows.

#### Environmental Stress Crack Resistance (ESCR)

Accelerates the stress crack test to detect the presence of material or geometry-related stress failure concerns.



**PASS** 

#### Brittleness (FT-LB)

Verifies pipe will not crack under handling, installation, and backfill processes.



**FAIL** 

#### Color (ESCR)

Length (%)

Confirms length is greater

than 99% of the stated value.

**Elongation Max (%)** Ensures pipe will not excessively

stretch during installation.

Prevents premature UV degradation, limited with 4% max, in order not to adversely affect physical properties.





# Added **Performance** Bonus

Recycled pipe performs just as well as virgin in the field, but it also has a few extra valuable selling points.



2ND LARGEST recycler in North America.



Recycled resin uses total energy than virgin.



Our reason is water.™

Learn more at www.sustainability.ads-pipe.com.