

Product Data Sheet

CasTech Axel 650

Nov-2025, Ver. 01.01



Accelerating & Strengthening Plasticizer – ASTM C494 Type C

DESCRIPTION

CasTech Axel 650 is a high-performance setting and hardening accelerator plasticizer for concrete and cementitious mortar. It is a specially formulated admixture based on chloride-free, high-quality polymers.

CasTech Axel 650 significantly reduces setting time and improves early compressive strength.

USES

- Early strength concrete
- Precast concrete industry
- Moulded concrete
- Water structure projects
- Prestressed concrete
- Brick and curb casting works

ADVANTAGES

Key advantages:

- Increases strength in very early stages
- Enables earlier stripping of formwork
- Fast setting for cold weather concreting
- Chloride free, safe to be used in contact with reinforcement
- Compatible with all types of cement and cements containing clinker, blast furnace slag or micro silica
- Compatible with all other CasTech admixtures

TYPICAL PROPERTIES

Consistence	Liquid
Colour	Clear
Chloride Content (BS 5075)	Nil
Classification According to ASTM C494 / BS 5075 Part 1	Type C / Complies
Specific Gravity	1.17 ± 0.02 @ 25°C
pH	5.0 ± 1.0

COMPATIBILITY

CasTech Axel 650 is compatible with other admixtures used in the same concrete mix. Trials must always be carried out before combining products in specific mixes. Please consult our technical department for more information and guidance.

INSTRUCTIONS FOR USE

CasTech Axel 650 is a ready-to-use liquid which is dispensed into the concrete batch plant together with the mixing water. The addition of **CasTech Axel 650** to dry aggregate or cement is not recommended.

DOSAGE

The recommended dosage ranges from 0.40% to 2.5% by weight of cement; a dosage of 1.5% is commonly used. Other dosages may be recommended in special cases according to site conditions. Trial mixes should be prepared to determine the optimum dosage.

Overdosing:

Exceeding the recommended dosage will result in a very significant reduction in setting time; in bulk concrete pours, high heat emission is expected. Adequate curing is necessary to keep the ultimate strength of the concrete unimpaired.

PRECAUTIONS

Health & Safety:

CasTech Axel 650 is a water-based liquid and is not a fire or health hazard. However, it should not be swallowed or allowed to come into contact with skin and eyes. Suitable protective gloves and goggles should be worn. Spillages should be washed down immediately with cold water. For further information refer to the Material Safety Data Sheet.

Curing:

Curing methods to protect concrete surfaces should be adopted.

STORAGE

Up to 1 year in unopened original packing, protected from extremes of heat and cold and stored under shade.

Fire:

CasTech Axel 650 is not a fire hazard.

PACKAGING

CasTech Axel 650 is available in 210-litre drums or 1000-litre bulk.

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TECHNICAL SUPPORT

CasTech provides technical support service on mix design,

admixture selection, evaluation of trials, dispensing equipment etc.
Please contact the Technical Department in these cases.

CasTech MIDDLE EAST FZE

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