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Asset Identification Solutions

# Retrofit Adhesive

## Aquahesive™ 5836

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Revision

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# Aquahesive™ 5836

## General Information

Aquahesive™ 5836 is a two component, high-performance polyurethane adhesive.



Supplied with the curative in a ready to mix form, Aquahesive™ has a long pot life making it ideal for shallow retrofit installations. Once cured, it is a tough, robust material with good general physical and chemical properties. Research has shown Aquahesive™ to provide excellent resistance to seawater in ageing trials.

Polyurethane adhesives have limitations and care must be taken to ensure that the conditions under which Aquahesive™ is mixed falls within the ranges of a minimum temperature of 10°C and maximum humidity of no more than 65-70%.

## Technical Data

<b>Aquahesive™ 5836 – Part A</b>	
Base	Mixture of Polyols
Colour	Beige / Buff
Viscosity at 25°C	Pasty
Density	~1650 kg/m <sup>3</sup>
Solids Content	100%
Flash Point	Above 200°C
Solvent	None
<b>Aquahesive™ 5836 – Part B</b>	
Base	Polyisocyanate
Colour	Brown
Viscosity at 25°C	~100 mPas
Density	~1220 kg/m <sup>3</sup>
Solids Content	100%
Flash Point	Above 200°C
Solvent	None



## Operational Data

Operation	Instruction
Pot Life - Onshore	Approx. 30 minutes
Pot Life – Subsea	Approx. 30-60 minutes
Curing Time	24 Hours
Coverage	100-400 g/m <sup>2</sup>
Storage Temperature	Minimum: 5°C / Maximum 35°C
Temperature Resistance	Minimum: -40°C / Maximum: 150°C
Shelf Life	6 months from date on kit

Please note, the pot life and cure times detailed above is an estimate only, and can vary depending on the ambient conditions. In colder water temperatures the times will be longer, therefore the adhesive may not completely cure within 24 hours however it will provide enough adhesion to attach to the substrate without any concern of movement.

## Substrate Guide

Research has shown Aquahesive™ to provide good adhesive strength to epoxy-coated steel, as well other steels and plastics such as Stainless, Mild, Nylon, ABS, Polycarbonate and Acetal®C Derlin.

We always recommend surface adhesion tests are carried out to ensure compatibility with the specification of substrate the adhesive will be applied to.

## Installation

### Surface Preparation

Prior to applying the adhesive, clean the area by UHP water-jetting and/or hydro-blasting to remove any marine biological growth and loose contamination.

### Adhesive Mixing

**During mixing, personnel should wear PPE; gloves, skin protection and safety goggles.**

Aquahesive™ is supplied in two components; Part B is packaged within the Part A container.

**ALL** of Part B must be poured into Part A, and mixed with the spatula until a smooth paste is formed.



Once the materials are mixed, we recommend the container is placed into a bucket of cold water to help control the temperature prior to deployment.

### Applying the Adhesive

The two components of Aquahesive™ 5836 must be mixed topside, however there are two options for applying the adhesive;

1. Mixed and **applied to the substrate topside** prior to deployment subsea
2. Mixed topside, then the adhesive container is lowered to the site by the diver, and **applied to the substrate underwater.**



Both options have been tested internally and were successful in achieving a strong bond to the substrate as an underwater adhesive solution. A spatula and spreading tool will be provided as part of the Aquahesive™ kit to ensure an even coverage.

Once subsea, the adhesive should be spread liberally aiming to achieve an approximate 5mm layer of adhesive, as excess adhesive can be removed from the edges.

### Supporting Documents

Although we do have installation documents and videos for Aquahesive™ 5836, as it is traditionally used in conjunction with our Aquasign® markers, the steps referenced are for installation topside.

However, our online video will give you an opportunity to see the adhesive as well as provide guidance on the correct mixing of the adhesive prior to applying onto the substrate. To view, please [click here](#).

### Track Record

Aquahesive™ 5836 was used to retrofit install Aquasign® identification markers onto the Flotta Terminal's subsea pipeline by diver. Retrofit Adhesive solutions have also been installed on various Maersk projects in the North Sea, including the Gryphon field.

### Company Contact Details

If you have any further questions regarding the retrofit installation of Aquahesive™ 5836, please contact us direct either by telephone or email.

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