IMPORTANT FITTING NOTES

WARNING! USING THE WRONG TYPE OF COOLANT/ANTIFREEZE CAN DAMAGE YOUR NEW SILICONE HOSES. PLEASE READ THE GUIDANCE BELOW IN FULL BEFORE BUYING OR USING ANY COOLANT WITH SILICONE HOSES. PROBLEMS CAUSED BY INCORRECT COOLANT USAGE ARE NOT COVERED UNDER WARRANTY.

SILICONE HOSE AND COOLANT/ANTIFREEZE

Several types of coolant exist, the main two being traditional Inorganic Acid Technology (IAT) coolants, and newer long life Organic Acid Technology (OAT) coolants used in vehicles designed after around 1998. Hybrid Organic Acid Technology (HOAT) coolants also exist which are a combination of the two. Some types of coolant can be **harmful** to silicone hoses and other rubber, copper and brass components, so it's important to choose a coolant that is suitable for both your vehicle and silicone hoses.

IMPORTANT NOTES

There are a few commonly made mistakes that can be very damaging to coolant system components, particularly with silicone hoses. Follow the guidelines below in all cases when fitting silicone hoses, regardless of the coolant type being used.

1) **ALWAYS** change coolant regularly, **at least** as frequently as the coolant manufacturer recommends.
2) **ALWAYS** use de-ionised water to dilute coolant. **DON'T** use tap water to dilute or top up the coolant system. Minerals in tap water can react with silicone to damage hoses, radiators and other components.
3) **ALWAYS** thoroughly flush out the coolant system with clean water (tap water is fine for this purpose, as long as it is well drained afterwards) before filling with new coolant. Ensure all old coolant has been removed and **NEVER** mix different types of coolant e.g. IAT with OAT coolant. Doing so can cause a reaction and damage the coolant system. This includes when topping up the vehicle - always use the same coolant as it was filled with.
4) **DON'T** use WD40 or any other oil-based lubricant when fitting or cleaning silicone hoses. Use washing-up liquid (dish soap) for both lubrication and cleaning.
5) Use the **lowest concentration** of coolant that is safe for the temperatures you will operate the vehicle in. E.g. if the manufacturer specifies 33% concentration is suitable for protection down to -18°C and your co0untry doesn't regularly experience temperatures below -18°C you should dilute it to 33% rather than the commonly used 50% dilution.

IF YOUR VEHICLE USES IAT COOLANT AS STANDARD

IAT coolants, often blue or green in colour, are silicate or phosphate based and need replacing every 2-3 years. All IAT coolants are safe for use with silicone hoses, so if your vehicle was factory filled with IAT coolant you should use IAT coolant, still following the "Important Notes" above. IAT coolant can actually be used safely with any vehicle, the only downside is that it requires changed every 2-3 years, rather than 5-10 years like longer life coolants. **IF YOUR VEHICLE ORIGINALLY SPECIFIED AN IAT COOLANT, WE DON'T RECOMMEND USING AN OAT COOLANT.**

IF YOUR VEHICLE USES OAT COOLANT AS STANDARD

OAT coolants, usually red, pink, orange or purple in colour, only need replacing every 5-10 years. However, some OAT coolants contain 2-Ethylhexanoic acid (**2-EHA**) which is a plasticizer and may **damage** silicone rubber and plastics, including silicone hoses, engine gaskets and other rubber or plastic components.

If you want to keep the 5 year+ coolant change interval offered by OAT coolant, it is important to choose a coolant that does not contain 2-EHA. This can be difficult as most OAT coolant manufacturers do not specify the inhibitors used in their products. Both IAT and Hybrid OAT coolants can be used in all vehicles, so you can use one of these instead of OAT. We've provided a list of OAT coolants at the bottom of this document which are safe for use with silicone hoses.

IF YOUR VEHICLE USES HYBRID OAT COOLANT AS STANDARD

Hybrid OAT coolants usually contain no 2-EHA, so if your vehicle uses a Hybrid OAT coolant you should continue to use the original specified coolant.

COMPATIBLE OAT & HYBRID OAT COOLANTS

Below is a list of OAT and Hybrid OAT coolants that are compatible with silicone hoses. Some of these products are available in pre-mixed and concentrate versions and in all cases either can be used. All coolants need to be used in accordance with the "Important Notes" above.

- Comma Xstream G30
- Peak Global Lifetime Coolant / Peak Antifreeze + Coolant
- Valvoline Zerex Asian Coolant
- Toyota Long Life "Red" Coolant
- Honda Type 2 Long Life Antifreeze/Coolant
- Mazda FL22 Coolant / Ford Motorcraft Speciality Green Coolant / Ravenol HJC Protect FL22
- VW G12 / G12+ Coolants
- Any G-05 Coolant
- Evans also claim their Waterless Coolant is suitable for use with Silicone Hoses