

deox-C

concentrated rust remover

Product Function



deox-C is a crystalline, 100% active corrosion removal product. Formulated for the removal of corrosion products from steel, stainless steel and most ferrous materials (see Precautions below). This product is dissolved in tap water to produce a bath of powerful rust removing liquid. Use of deox-C will eliminate the risk of distortion to thin steel sections, which can result from the blast-cleaning process. Unlike abrasive cleaning methods such as grinding, sanding or blast-cleaning deox-C will not remove sound steel surrounding corroded areas. The risk of grit inclusion resultant from blast-cleaning, proven to cause early coating failure, corrosion and mechanical wear, is eliminated. Slag-based blast cleaning media all contain heavy metals which when used in open-nozzle blast-cleaning equipment liberate dust that may contain harmful levels of these elements.

deox-C is harmless, non-flammable, does not emit toxic vapours, it's biodegradable and will not damage the environment. However, deox-C will sting skin abrasions and cuts. Wash with plenty of running clean water after skin contact. If hands are to be submerged for long periods rubber gloves should be used. In case of contact with eyes wash with plenty of running water and seek medical advice.

This product must be dissolved in hot water before use, it is suggested that very hot tap water and stirring are used to speed dissolution; the resultant solution will be water-clear. The strength of the solution may be varied from 5% to 20% by weight or volume of deox-C to water:

deox-C	Water	Strength Achieved
1Part	19 Parts	5%
1Part	4 Parts	20%

How to Use



It should be noted that 5% or 10% solutions are very effective even for heavy corrosion removal and allow the economical production of sufficient quantities of liquid to submerge large objects. Always test deox-C at low addition rates it is often surprising to individuals that deox-C can do its job at these low rates. Increasing solution strength up to 20% will remove very heavy corrosion and increase the bath's useful life, i.e. for prolonged repeated use.

Plastic, and stainless steel vessels are suitable for holding the prepared liquid. Steel and galvanised steel should not be used. Commonly available, useful, containers include: buckets, plastic dustbins, domestic water-storage tanks, etc. Remove any very loose corrosion, oil, grease and dirt before immersion. Grease and oil will prevent successful treatment. Whilst deox-C will remove very heavy corrosion it is preferable to remove loose corrosion mechanically to prolong the activity of deox-C. To increase treatment speed items should be removed from the solution occasionally; rust which appears to be still attached to the surfaces can be very easily brushed away using a stiff plastic-bristled, or wire-brush. Continue immersion until a clean rust-free surface is achieved. Prolonged soaking (+72hrs) may be required for very heavy corrosion especially at low temperatures. Remember to remove the article periodically to remove any surface build-up, this will help to keep the active deox-C solution at the work face. Very rapid corrosion removal is possible by heating the solution to 70oC Max (with, for example, suitable immersion heaters). Slow results will occur with temperatures at around 10oC. For hot tank applications it is preferable to prevent evaporation by using a loose fitting lid. When using hot-tanks check item hourly.

Rinse treated items with clean water; it may be necessary to agitate the surface with a stiff brush to remove debris accumulated in pits that were caused by corrosion. Dry surface after the rinsing process.

If it is not intended to re-paint the item immediately Bilt-Hamber atom-mac can also be used to prevent flash corrosion before long term treatment is possible. deox-C baths will change colour as corrosion is removed, once the solution is saturated (very dark yellow /black) the rust removal capabilities will be exhausted.

Precautions



deox-C is formulated to remove corrosion without aggression to underlying sound material and can therefore be used successfully to derust extremely delicate items. However for such delicate or close tolerance items check progress frequently and remove when surfaces are clear of rust. A coating of water resistant grease or petroleum jelly can be used to protect machined surfaces whilst rust removal is in progress on other areas of the same object - check frequently.

Always submerge for at least 24 hours a sample or small non-essential area of any metal or casting to ensure suitability of material for treatment before full immersion of the entire object, and ensure that shaped articles do not contain vulnerable materials. Certain metals, including zinc, lead, tin, and alloys containing those metals, should not be immersed.