



# GRANVILLE

## OIL & CHEMICALS LTD

### ROTHERHAM, ENGLAND

#### GRANVILLE HEAVY DUTY RUST CONVERTER APPLICATION SPECS

To be read in conjunction with instructions and conditions on container label. Follow instructions carefully as we cannot be responsible for application because we have no control over conditions.

Granville HRC01 heavy duty rust converter is to be applied only to rusted ferrous metals, (iron or steel), including galvanised steel where rust is present. HRC01 is non toxic to use but must not be in contact with drinking water without topcoating with Granville Barrier coat or equivalent.

For all steel surfaces heavy rust and mill scale must be removed. Use a needle gun or angle grinder to remove heavy rust build up. Use wire brush to remove lighter rust. Remaining rust must be firm without blisters or flakes. **HOSE STEEL AFTER SANDING OR WIRE BRUSHING WITH HIGH PRESSURE WATER TO REMOVE ALL RUST PARTICLES AND PAINT STEEL WHILE DAMP, use a spray bottle to keep the steel damp if needed.** Remaining firm old paint that has no rust creeping underneath may be left, as Granville HRC01 will adhere to it provided contact has been made with the rusted surface. It is not necessary for the complete surface to have rust present, Granville HRC01 will overlap successfully onto bright steel. Surface must be cleaned free of grease, oil, dirt etc. Detergent may be used but all trace of detergent must be rinsed away. Some detergents even after rinsing leave a deposit which causes Granville HRC01 to go rubbery when dry.

If it is decided to grit blast the surface Australian Standards are to be used. Blasting may be wet or dry. Flash rusting must not be allowed to progress to become normal rust. Therefore, strong hosing of surface must take place on the same day as blasting begins and immediately after blasting. Then painting of the first coat of Granville HRC01 must proceed immediately after hosing or immediately after flash rusting appears and finish on the same day. The surface may be vacuumed after dry blasting prior to hosing. This same day instruction also applies to wire brush preparation.

**TEMPERATURE.** The surface to be painted must not be below 10deg Celsius with very dry air or above 35deg Celsius, (the surface itself should be checked, not just the air around). If the surface is too hot, Granville HRC01 will dry too fast and it will not have had time to convert the rust. If the surface of the steel feels very warm to the touch you can call it too hot. You may be able to cool it enough with the rinsing water but use common sense. The air if warm may be humid but do not overdo it. **AVOID COLD WET ATMOSPHERES, FOG ETC.** If too cold Granville HRC01 will never dry. If the surface of the steel feels very cold to the touch, you can call it too cold. **In practice if the air temperature is below 15degC it will probably be too damp laden, and if above 30deg the surface will usually be too hot. Do not paint in direct sunlight.**

**Always try a small area first to ensure that conditions are right for drying. Steel can get deceptively cold or too hot.**

**ENCLOSED AREAS** Granville HRC01 heavy duty must dry black in approx half an hour to one hour. If it takes longer the weather or surface is too cold and damp. Tight crevices and closely covered areas or confined rooms will inhibit drying as the air cannot circulate. If either of these situations exist then it is essential that warm moving air is provided while painting those areas.

**Pour less than you think you will use (it goes much further than you think) into a plastic (NOT METAL) container. NEVER pour unused portion back into main container.** Ensure adequate ventilation, also gloves and eye protection are advisable. Granville HRC01 will stain the skin until scrubbed off and splashes in the eye will sting. **The rusted surface could well be dampened for the first coat.**

**Always Try a small area first with Granville HRC01 while surface is damp,** then when dry, test with a scraper. Granville HRC01 will not peel off rubbery unless surface is contaminated with detergent, oil etc. If Granville HRC01 peels rubbery, change your detergent or check for contamination from oil etc.

When painting Granville HRC01 brush each way every way across surface to ensure good penetration and contact with the rust. If Granville HRC01 does not contact rust it will stay blue and soft. Brush back over same area for approx 10 seconds. Avoid creating air pockets. Wash equipment with water immediately after painting.

When overlapping onto bright steel keep the coating on that part not heavily built up. Spraying is not recommended because in practice the follow up brushing will not be done.

It is not necessary to treat the whole surface in one go as Granville HRC01 will adhere well to previously painted surfaces. Just make sure that each new patch of rust is brushed and washed as per the first part of these instructions while making sure that the painted section is also washed free of any rust powder.

Granville HRC01 is non flammable and when dry is flame retardant. Welding over Granville HRC01 will create hydrochloric acid fumes which will irritate and settle on other surfaces.

Slight flash rusting may only require one coat (probably best to do the whole surface but with only a thin coat), but usually the surface will require two coats over the rusted areas to avoid ghosts in the film.

Three coats are recommended for any outside marine environment as the rust pinnacles must be well covered. Aim for a thick glossy appearance.

Recoating time one hour after drying at 20 deg Celsius, the next day or longer if colder. It is not necessary or desirable to rub or sand down between coats. If necessary wash or wipe down with fresh water. Wash equipment with water immediately after painting. Allow coats to cure hard before topcoating to avoid bleed through. Curing time may be the next day in summer to a few days in winter. Thicker patches will take longer than thin patches. Warm blowing air greatly speeds up curing time. Should Granville HRC01 bleed through the topcoat it did not have enough curing time, however it is usually only a cosmetic problem unless you were applying when the surface temperature was too cold.

In a salt environment you may find that touchups of Granville HRC01 are required for the first few weeks as it almost impossible to wash salt out of steel and that salt will work to the surface. However it is extremely unlikely that these rust pin pricks will creep under the surface of the surrounding Granville HRC01. After the salt has worked out of the surface the rust spotting will cease.

Keep in mind that Granville HRC01 needs to be able to contact the rust to work. It cannot reach between lapped steel or into tight crevasses.

Granville HRC01 is very compatible with epoxy top coatings and epoxy fillers.

Granville HRC01 must not be overcoated with any metallic paint such as zinc or the zinc will react with the steel through the rust converter. However, Granville HRC01 is ideal as a coating over zinc paints.

Paints with Zylene such as International Multiprimer 198 may cause puckering.

Solvent 808 may cause problems of puckering or softening.

Jotun Mastic 87 is used very successfully over Granville HRC01 Rust Converter.