

Corrosion Assassin — Technical Data Sheet v4.0

Date of issue: October 2026

1. Product

Item	Detail
Product name	Corrosion Assassin — Liquid
Product type	Industrial rust remover and corrosion inhibitor
Chemistry	Water-based phosphoric acid solution with wetting agents
Pack sizes	5 L jerry can · 25 L drum · 1000 L IBC
Supplier	Green Guard Industrial Solutions (Pty) Ltd · gary@greenguardis.co.za · +27 73 267 1150 · www.greenguardis.co.za

2. What it does

Rust removal: dissolves rust on ferrous and stainless steel by spray, brush or immersion, without grinding, sanding or wire-brushing.

Corrosion inhibition: leaves a thin iron-phosphate film on the cleaned metal that resists new rust during storage and transport. The film is paint-ready; no degreasing or neutralising is needed before coating.

3. Physical properties

Property	Value
Appearance	Clear liquid
Odour	Soapy, acidic
pH (neat)	1
Relative density	1.12
Boiling point	112 °C
Flammability	Non-flammable
Solubility in water	100%

4. How to use

Use as supplied. Do not dilute.

1. **Prepare:** remove loose rust, dirt, grease and oil. Heavy oil must be degreased first.
2. **Apply:** spray (large or flat areas), brush (vertical and detail work), or immerse (small to medium parts, heavy rust; the most effective method).
3. **Leave to work:** see contact times below. Re-wet if the surface dries.
4. **Finish:** wipe off excess with a clean cloth. Do not rinse unless the application requires it; rinsing removes part of the protective film.
5. **Coat, store or return to service:** paint or powder coat directly onto the treated surface.

Rust level	Contact time
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Light or flash rust	10–30 minutes
Moderate rust	30 minutes – 1 hour
Heavy rust or scale	1–2 hours

5. Surface compatibility

Material	Use
Mild, carbon and tool steel	Yes — primary use
Cast iron	Yes; heavy oxidation may need longer contact
Stainless steel (304/316)	Yes; wipe off excess
Standard industrial paint	Yes; does not attack it when used as directed
Rubber, hoses, seals, gaskets	Yes when used as directed
Aluminium	Test first; short contact only, no soaking
Copper and brass	Test first; short contact, wipe off promptly
Galvanised steel	Test first; short contact, wipe off promptly, no soaking, ventilated areas only
Magnesium	No
Chrome plating, nickel plating, anodised aluminium, polished decorative finishes	No

Contact with aluminium, zinc, magnesium or galvanised steel releases hydrogen gas. Never use on these metals in confined or unventilated spaces.

6. Bath and tank materials

Material	Suitable for baths and fittings
Stainless steel, PVC, polypropylene	Yes
HDPE	Yes for containers; confirm for permanent installations
Mild steel, aluminium, galvanised steel, brass, copper	No

Bath solution can be reused. Replace it when contact times lengthen, sludge builds up or the solution separates. Neutralise the spent solution to pH 6–8 before disposal.

7. Storage

Store in the original sealed plastic container at ambient temperature, out of direct sunlight. Protect from freezing. Keep away from alkalis, oxidising agents and reactive metals. Shelf life: 12 months from manufacture in the unopened original container.

8. Safety

Skin and eye irritant (WARNING). Wear safety goggles, PVC or rubber gloves, an apron and boots. Do not mix with other chemicals. For full safety information, see the Corrosion Assassin Safety Data Sheet v4.0.

9. Disposal

Neutralise with soda ash to pH 6–8, then dispose of through a licensed effluent contractor. Do not discharge to storm water drains.

10. Disclaimer

Information is given in good faith based on current knowledge of the product. Users must test on a small area first and confirm suitability for their own surfaces, conditions and downstream processes, including any structural or safety-critical use. Green Guard Industrial Solutions accepts no liability for indirect or consequential loss arising from use or misuse of the product.