

# TECHNICAL DATA SHEET

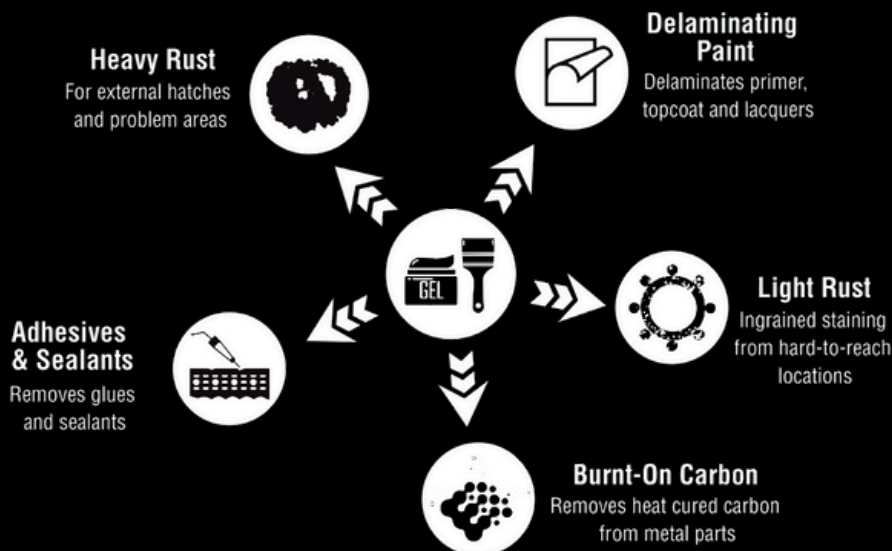
## UNIVERSAL POWER GEL (UPG25)

An Aqueous-Based High Cling Gel for Removing Unwanted Coatings and Baked-On Contaminants From Metal Surfaces.



## ONE SOLUTION. HUNDREDS OF USES.

### WHAT WE CLEAN



Powered by Terrafend's chemical technology, NEMO harnesses the power of its patented cleaning methodology to enable effective and natural contaminant separation and fluid re-use without loss of performance or cross contamination.

Unlike a solvent, caustic or heated product UPG25 is designed to penetrate through the surface layer of a contaminant/covering, softening through to the substrate below and changing the tension where the two meet. This effectively enables the contaminant to be removed from the surface in its entirety or in larger particles.

Thanks to its unique thixotropic formulation, UPG25 can be effortlessly applied using a brush or a hand spray bottle, ensuring complete coverage and wetting of the affected surface. After application, it transitions back to a gel-like state, making it ideal for challenging areas. This includes vertical surfaces such as walls and pipes, even inverted surfaces like ceilings, support beams, hard to clean mechanical infrastructure and rust prone surfaces.

### KEY BENEFITS

- Significantly reduces vessels chemicals inventory.
- Improves onboard safety for crews
- Drives cleaning efficiency across all areas
- Helps prevent oxidation and protects surfaces
- Reduces environmental footprint and drives sustainability.
- Designed to last longer than traditional cleaners, maximising commercial returns.

### OPERATING TEMPERATURE RANGE

# 1\*-38°C

UPG25 can be used above 38°C, but will be less effective than within its core operating range.

\*Best results achieved at temperatures above 15°C.

Excessive time over 58°C will degrade the fluid and limit its working life.

### INFORMATION: PHYSICAL AND CHEMICAL

STATE	Thixotropic Gel
COLOUR	Pale Yellow
ODOR	Mild Sweet Acrid Odour
SOLUBILITY IN WATER	Miscible
BOILING POINT	100°C
p.H.	3
VISCOSITY	Thixatropic

### PRODUCT DISPOSAL

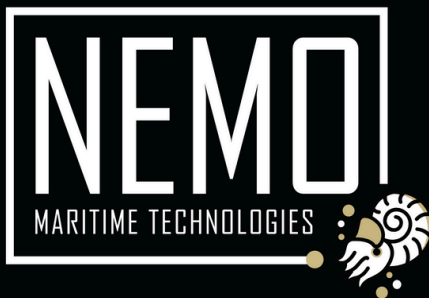
All surfactants used in this formulation are fully biodegradable and that there are no PBT's in our formulation and no bio accumulation potential.

### SHELF LIFE

# 24 months

When in sealed container.





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### SUGGESTED DWELL TIMES

HEAVY CLEANING	LIGHT CLEANING	ULTRASONIC CLEANING	FLOOR CLEANING	CARBON REMOVAL	ADHESIVE SEALANTS
<b>1-24</b> HOURS	<b>5-20</b> MINUTES	<b>5-20</b> MINUTES	<b>1-24</b> HOURS	<b>5-20</b> MINUTES	<b>15-60</b> MINUTES

### FOR REMOVING



Heavy Rust  
& Staining

To remove heavy rust and staining, paint or spray UPG25 onto the effected surface and leave for 1 to 24 hours before wiping away depending on depth of rust, multiple application may be required for optimum results.



Unwanted  
Surface Coatings

To remove surface coating, paint or spray UPG25 onto the effected surface and leave for 5-20 minutes before wiping away for single layer coatings, Multilayer coatings will require longer or multiple applications.



Hard Carbon  
Deposits

To remove Hard Carbon deposits, paint or spray UPG25 onto the effected surface and leave for 5-20 minutes before wiping away, a final wipe with USC 25 ca help to solid carbon build up after cleaning.



Adhesives  
& Silicones

To remove adhesives such as Epoxy or Methacrylate (MMA) based systems, paint or spray UPG25 onto the effected surface and leave for 1 to 2 hours before wiping away, depending on depth of adhesive a second application may be required.

For silicones leave UPG25 in contact for 15-60 minutes for the best results.

### APPLICATION TYPE PROCEDURES

#### SPRAY OR PAINT ON



Apply UPG25 directly to the affected areas using a spray or brush. Its thick formula clings to vertical and uneven surfaces, where traditional liquids tend to run off or fail to penetrate. The longer it's left to work, the more it removes—giving you full control over the depth of cleaning. Once it has been left on for the desired time, rinse or jet wash off carefully.



### RUST REMOVAL

Length of time you leave gel will depend on the severity of the rust. If the gel is left on a surface for too long it might result in more surface layers being removed than you require.

### VOLUME OPTIONS

20L Container

### VENTILATION & EXPOSURE LIMITS

UPG25 has little vapour ability, so use in a well-ventilated space.

Use nitrile gloves, eye protection, and overalls.

### SURFACE PREPARATION & PASSIVATION

UPG25 will passivate metal surfaces when gel is left for a period of time, however the gel must be fully removed prior to painting.

### WARM ENVIRONMENTS

UPG25 when applied to warm environments (engines, mechanical moving parts etc), can significantly decrease cleaning times. Improving the activation time of the gel, so please ensure you monitor the delicate surfaces as to not remove more layers than required.

### SURFACE PENETRATION TIME

# 5-300 minutes

Every surface type, contaminant severity and contaminant type will vary. Particulate softening can happen in as little as 5 minutes or in extreme cases may take a few days.

Always ensure component is compatible prior to soaking.

### PPE AND HAZARD STATEMENTS



H315: Causes skin irritation

H319: Causes serious eye irritation

