



# TECHNICAL DATA SHEET

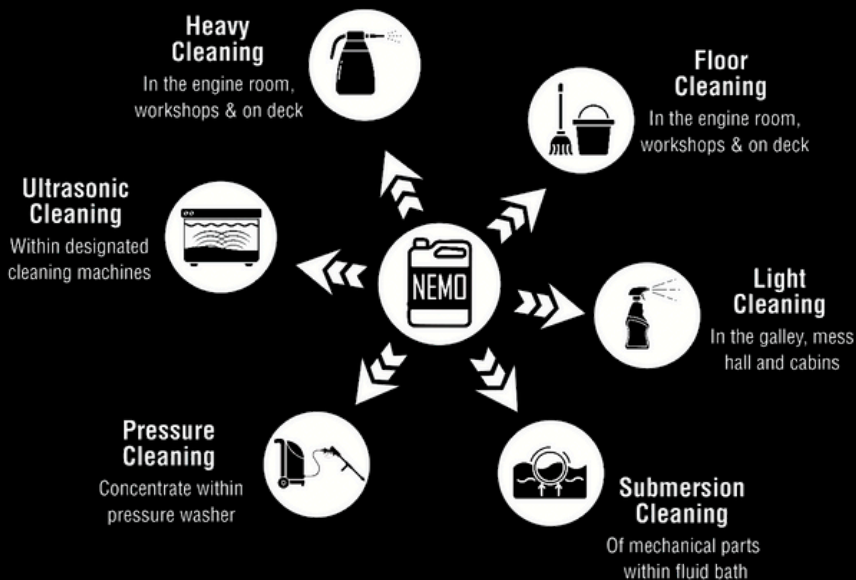
## UNIVERSAL SUPER CONCENTRATE (USC25)

Powerful Multipurpose Vessel Cleaning Fluid  
Designed for Universal Use Above Deck and  
Below.



## ONE SOLUTION. HUNDREDS OF USES.

### DEPLOYMENT METHODS



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, USC25 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 larger particles.

USC25 is a highly concentrated solution, offering remarkable versatility for a wide range of cleaning applications via simple dilution with water removing the need for multiple different cleaning solutions for different applications.

### 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

USC25 can be used above 38°C, it will still work very well but longevity may be affected.

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

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

### FLUID LONGEVITY

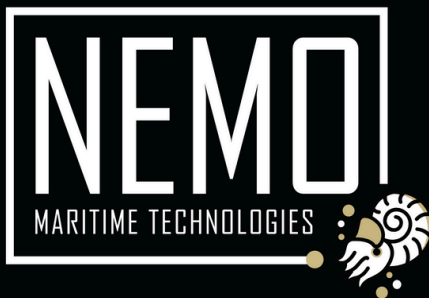
After use, USC25 can be collected, settled and re-used multiple times before disposal.

Re-capture and re-use can vary between application, contaminants and industry, and range from 3 to 5+ complete cycle.

### INFORMATION: PHYSICAL AND CHEMICAL

STATE	Liquid
COLOUR	Yellow
ODOR	Characteristic Odour
SOLUBILITY IN WATER	Miscible
BOILING POINT	100°C
p.H.	11
RELATIVE DENSITY	1.1-1.2
REFRACTIVE INDEX	1.2-1.3





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### SUGGESTED DILUTION RATIOS

LIGHT FLOOR CLEANING	HEAVY FLOOR CLEANING	PRESSURE CLEANING	LIGHT CLEANING	ULTRASONIC CLEANING	SUBMERSION CLEANING	HEAVY CLEANING
100:1 to 40:1 (Warm Water)	40:1 to 6:1 (Warm Water)	30:1 (Ambient or Heated)	40:1 to 6:1 (Ambient Water)	6:1 to 4:1 (20-80°C Working)	6:1 to 4:1 (Ambient Water)	3:1 MAXIMUM (Ambient Water)

Dilution ratios will vary depending on contaminant type, surface type and activation time.

### FOR REMOVING



Oil, Grease & Fuels

To remove oil, grease, and fuel, it is recommended to dilute USC25 at a 6:1 ratio with water. Apply the solution via spraying, painting, or wiping, and let it dwell for at least 30 seconds before wiping off or rinsing with clean water.



Carbon Deposits

For the removal of heavy carbon deposits, it is recommended to prepare a dilution of USC25 at a ratio of 3:1 with water to achieve an optimal cleaning solution for washing by hand alternatively for ultra sonic cleaning a 4:1 dilution can be used.



Rust Staining

For the removal of rust staining, it is recommended to prepare a dilution of USC25 at a ratio of 4:1, also in combination ultrasonic can greatly reduce cleaning time.



Dirt & Grime

For the removal of dirt and grime, it is recommended to prepare a dilution of USC25 at a ratio of 6:1 for hand cleaning alternatively high pressure can be utilized with a 4:1 dilution ratio.



Sticky Stuff

For the removal of adhesive substances, it is recommended to prepare a dilution of USC25 at a ratio of 3:1 or 6:1 depending on age and viscosity of the substrate.



Food Stuffs

For the removal of food stuff or other organic matter, it is recommended to prepare a dilution of USC25 at a ratio of 40:1 for hand and or mop cleaning.

### SOAK IMPACT TIME

# 5-300 minutes

LIGHT  
5-10  
mins

MEDIUM  
10-30  
mins

HEAVY  
30-120  
mins

EXTRA HEAVY  
120-300  
mins

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.

### SHELF LIFE

# 24 months

When in sealed container.

### RUST PREVENTION

The (proprietary) surfactants (surface active agents) used in USC25's formulation form an effective oxygen barrier on the substrate (metal) surfaces thus preventing oxidation from atmospheric oxygen.

### VOLUME OPTIONS

20L Container  
1000L IBC

### VENTILATION

The following do not require any specific extraction and can be used in any well-ventilated space: Light Cleaning, Heavy Cleaning, Floor Cleaning, Submersion Cleaning, and Ultrasonic Cleaning

The following do require extraction to remove the light mist created: Pressure Cleaning

### COMPONENT DRYING

USC25 will flash off a surface naturally if left, or drying times can be improved when using compressed air.

### PRESSURE RANGE

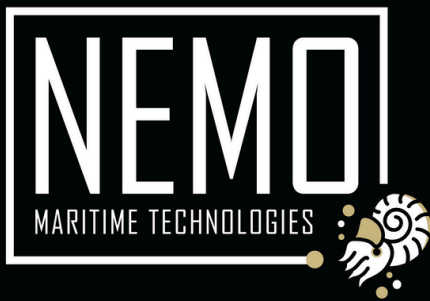
# 1000-6000 psi

USC25 will create a tight density high performance cleaning foam when deployed at higher pressure and time will be required for the foam to dissipate back to fluid before re-use. A settlement tank system is advised. Please consult a member of the NEMO team.

### 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.





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## FLUID USE PROCEDURES



### LIGHT FLOOR CLEANING

Dilute USC25 at a 100:1 ratio with water for use with a mop or by hand. Using warm water can further aid in breaking down stubborn stains, helping to speed up delamination from floor surfaces.



### HEAVY FLOOR CLEANING

Dilute USC25 at a 40:1 ratio with water for use with a mop or by hand. Using warm water can further aid in breaking down stubborn stains, helping to speed up delamination from floor surfaces.



### PRESSURE CLEANING

Either feed USC25 directly into the detergent line of your pressure washer and set the dilution to 30:1, or pre-dilute USC25 with water at a 30:1 ratio and use the solution as the feed. Using warm water can significantly reduce cleaning time by enhancing the product's effectiveness.



### LIGHT CLEANING

Dilute USC 25 with water at a 6:1 ratio. Apply the solution by spraying, brushing, or wiping, then allow it to dwell for at least 30 seconds before wiping away or rinsing with clean water.



### ULTRASONIC CLEANING

For ultrasonic cavitation cleaning, use a 4:1 dilution ratio. This method is particularly effective for removing hard carbon deposits and rust. Fill the tank to the appropriate level, place the part to be cleaned into the solution, and initiate cavitation, an operating frequency of 40 kHz is recommended. Preheating the fluid can further enhance the initial cleaning rate.



### SUBMERSION CLEANING

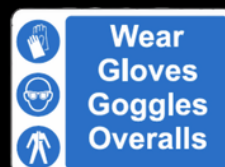
For submersion cleaning, including heated tanks and agitated sparge systems, a 4:1 dilution ratio is recommended. This method is highly effective for removing heavy oil, grease, and fuel residues. Fill the tank to the appropriate level and heat the solution to around 30–35°C for optimal results. Higher temperatures can be used; however, this may reduce the fluid's lifespan due to increased evaporation.



### HEAVY CLEANING

Dilute USC25 with water at a 3:1 ratio to create an effective hand-washing solution. Alternatively, diluting USC25 with warm water can help to speed up the initial surface softening of heavily contaminated substrates, enhancing overall cleaning performance.

## PPE AND HAZARD STATEMENTS



H319: Causes  
serious eye  
irritation

