

# **Marine Chemicals**

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Our products are constantly modernized to the costumers' requirments.

A.Borys Grodzki

# **Comparision Table**

DuoGhibli	Marine Care	Unito
Maintanance		
DG Envirocleaner	Careclean GP Enviro	Enviroclen
)G Degreaser HD	Careclean Degreaser GP	Coldwash HD
DG Petrosolv	Careclean Quick Split	Cleanbreak
DG Oil Dispersent	Careclean OSD Enviro	Seacare OSD
DG Electrocleaner	Careclean ECS Safe	Electrosolve E
DG Air Cooler Cleaner	Careclean ACC	Air Cooler Cleaner
DG Carbon Remover	Careclean Carbon	Carbon Remover
DG Universal Cleaner	Careclean Aquaqash	Uniwash
DG Multicleaner Eco	Careclean Multiclean	Aquabreak PX
Scale and Rust removers		
DG Descaler L	Careclean HD Descalex L	Descaling Liquid
DG Rust Remover	Careclean Rust	Metal Bride
DG Separator Cleaner	Careclean Separator	Disclean
DG Alu Brite		
Watertreatment		
DG Vapor control	Caretreat 1 Evaporator	Vaptreat
DG Diesel R011	Caretreat 2 Diesel	Rocor NB Liquid
OG Condensate Control	Caretreat 4 Condensate	Condensate Control
DG Anti-Fouling Agent	Caretreat 5 Seawater	Biogard
Tankcleaning		
DG Biver HD	Careclean Alkaline	Aquatuf
DG Tank Cleaner	Careclean Degreaser HD	Tankclean
DG Tank Cleaner Plus	Careclean Voyage (Seaclean)	Seaclean
DG Rust Remover	Careclean Rust	Metal Brite
DG Envirocleaner	Careclean GP Enviro	Enviroclean
DG Multicleaner Forte	Careclean Multiclean	Fore+Aft
Special Products		
DG Drain Solution	Careclean Sewage	Gamazyme BTC
DG Hand Cleaner	Careclean Hand	Natural Handcleaner
DG Ultrasonic Cleaner	Careclean Ultrasonic	Unitor USC
DG CitraSolv		
DG Freezer HD		
DG Antifreeze 55%		

#### **GENERAL DESCRIPTION OF MARINE CHEMICAL PRODUCTS**

# **Cleaning and Maintance**

DG Envirocleaner	A water-based degreasing agent with a wide range of applications. Contains solvents, natural orange terpenes, surfactants.
DG Degreaser HD	Highly concentrated degreaser for removing oil-based dirt, solvent-based and orange terpenes
DG Multcleaner Eco	Safe, water-dilutable, universal cleaning and degreasing agent.
DG Petrosolv	DG Petrosolv is heavy duty degreaser for removal of oil and grease. It can be used for deck and machinery cleaning, tank tops, bulkheads.
DG Oil Dispersant	Product for removing oil spills based on hydrocarbon solvents and nonionic surfactants
DG Electrocleaner	DG Electro Cleaner is special solvent for removal of oil and grease from electrical machines, components, equipment etc. It not contains chlorinated solvents.
DG Air Cooler Cleaner	DG Air Cooler Cleaner is special waterbased, degreasing formula for cleaning diesel Air Coolers and Turbochargers. For manual cleaning and in the work cycle.
DG Carbon Remover	Product for removing carbon deposits and soot. It contains safe solvents and microemulsions and surfactants.
DG Universal Cleaner	DG Universal Cleaner is a safe, biodegradable, with high-foam efect cleaning agent.

# Scale and Rust Remover

DG Descaler L	Concentrated liquid for removal of calcification resulting from the long action hard water.
DG Rust Remover	Concentrated, highly efficient formulation, containing phosphoric acid and surfactants, for removing rust from surfaces made of steel and cast iron.
DG Alu Brite	Concentrated acidic complex of acid, softeners, emulsifiers for cleaning oxidised surfaces of aluminium, removal rust from surfaces made of steel and cast iron and removal carbonized fumes.
DG Separator Cleaner	Acidic liquid product for cleaning separators discs and bowls

# WaterTreatment

DG Vapor control	DG Vapor Control is a safe, water-soluble, concentrated liquid for controlling scale and foam in evaporators.
DG Diesel R011	Product for preventing corrosion and fouling in cooling water systems of diesel engines.
DG Condensate Control	Agent based on amines that removes oxygen and prevents corrosion in steam and condensing systems. Anti-foam
DG Anti-Fouling Agent	Highly effective agent preventing corrosion and growth of algae and marine microorganisms (mollusks, barnacles, etc.) in sea water cooling systems and ballast tanks.

# **General Description**

Tank Cleaning	
DG Biver HD	Highly concentrated alkaline general purpose cleaner for the removal of strong or persistent cotamination, particularly fatty and oily ones. Also for cleanig after coal and pet coke.
DG Tank Cleaner	Product is used for general removal of most oil and fats in cargo, storage tank and also grease from soiled surfaces.
DG Tank Cleaner Plus	Extra concentarted product is used for general removal of most oil and fats in cargo, storage tank and also grease from soiled surfaces.
Special Products	
DG Drain Solution DG Hand Cleaner	Product is highly concentrated, aerobic bacteria-enzymes mixture to remove blockages, keep clean and cure odour from all kind of plumbing systems (sewage tanks, septic tanks etc.). Speciall product for cleaning heavily soiled hands. It removes oil, grease,
	tar, dirt, grease, grease dust, rust, oil, paints, varnishes, adhesives.
DG Ultrasonic Cleaner	Water-based cleaning agent for ultrasonic cleaning.
DG CitraSolv	Highly concentrated, water-based, biodegradable formulation for typical industrial applications. Contains strong plasticizers thus has the ability to intensive cleaning even stubborn dirt. It has a pleasant smell.
DG Freezer Cleaner	Water based , powerful, slightly alkaline cleaning agent for washing very greasy surfaces especially in fish vessel.
DG Antifreeze 55%	Glycol-based agent with low freezing point, -37 <sup>0</sup> C

# Oil Absorbent Pads and Marine KIT for oil Spills

Oil absorbent pads Regular	Oil only absorbent - pads 0,40m x 0,50m - 200 pcs. Aborbent only absorbing oils , crude oil and other petroleum products. Weight: 170 g/m2
Oil absorbent pads Medium	Oil only absorbent - pads 0,40m x 0,50m - 100 pcs. Aborbent only absorbing oils , crude oil and other petroleum products. Weight: 240g/m2
Oil absorbent pads Premium	Oil only absorbent - pads 0,40m x 0,50m - 100 pcs. Aborbent only absorbing oils , crude oil and other petroleum products. Weight: 350g/m2
DG Oil sorbent roll Medium	Oil only sorbent - roll 0,76m x 46m .Sorbent only absorbing oils , crude oil and other petroleum products. It does not absorb water and floats on the surface even after full saturation the erased substances.
DG Unisorbent	Unisorbent is a mineral sorbent, granulated, with a grain size of 0.5 - 1.0 mm, designed to remove all liquid substances from the surface - oils, fuels, other petroleum products, fats, lubricants, coolants and water.
DG Marine Kit for Oil Spills	DG SOPEP Spill Kit 120L is fully compliant with regulations for onboard spill containment and recovery equipment.

# Save, water based general purpose degreaser

### **Product description:**

DG Enviro Cleaner is neutral, safe, multi purpose cleaner and deagreser based on natural orange solvent extracts and andvanced surfactant formulation. It may be used successfully for most marine and industrial applicatons. It can be used for cleaning and deagresing deck and machinery. Easly removes greasy grime, oil, diesel spillages, sludge, wax, carbon deposits.

#### How to use:

Apply with nozzle foam making appliances, a brush, a cloth, an atomiser or use in immersion cleaning.

**General cleaning and degreasing:** use the product undiluted or dilute it with water at 1:1 to 1:10 ratio depending on how dirty the surface is.

Steam cleaning: allowable dilution ratios 1:10 - 1:50.

**Removing grease, oils and fats:** use the product undiluted or dilute it with water at a maximum ratio of 1:5.

**Immersion cleaning:** dilute with water a ratio of 1:2-1:5. After cleaning, rinse the surface.

### Package available:

20 or 25 liters canister

# DG Degreaser HD product nr: 5101

### Heavy duty water based degreaser

#### **Product description:**

Highly concentrated, water-based, biodegradable formulation based on solvents, emulsiyfing agents and surfactants. Thus DG Degreaser Ex has the ability to intensive cleaning even stubborn dirt and oil. Safe and effective for most surfaces: glass, metal, ceramics, plastic. Contains strong orange terpenes. Removes: grease, oil, tar, inks, waxes, polishes, adhesives a nd other heavy dirt. Product has quick penetration and good emulsifying properties. It has a pleasant smell.

#### How to use:

Apply with a brush, rag, spray or use immersion.
General cleaning and degreasing: dilution of 1:1 to 1:20 with water.
Steam cleaning: Dilution 1:20 to 1:100 with water.
Cleaning: oils, grease: Dilution max.1: 10.
Cleaning Immersion: Dilution 1:5 to 1:20 of water.
It is recommended to rinse with warm water to accelerate drying.
In every method of cleaning time of contact should be between 5 minutes to 2 houres.
Provide adequate ventilation indoors.

### Package available:

# Degreaser for oil and grease removal

#### **Product description:**

DG Petrosolv is heavy duty degreaser for removal of oil and grease. It can be used for deck and machinery cleaning, tank tops, bulkheads. It contains mixture of save, natural solvents and non-ionic surfactants. DG Petrosolv is highly effective degreaser. It is not corrosive and not toxic product. It is highly biodegradable and save for using on all common metals and painted/waterproof surfaces. It has nice orange smell.

#### How to use:

DG Petrosolv can be applied by brush, spray, immersion, soaking. Petrosolv can be used undiluted or diluted with water. Allow a residence time of at least 15-45 minutes for better penetration. After that period rinse cleaned surface with water (if possible with hot water) using waterjet (if possible high pressure waterjet).

#### Package available:

20 or 25 liters canister

# DG Oil Dispersant product nr: 5111

### Product to clear oil spills

### **Product description:**

Concentrated product, water-based, biodegradable formulation based on solvents, emulsiyfing agents and surfactants and hydrocarbons used to disperse and clear accidental oil spills on deck and in the sea. Product can be used also as a tank cleaner. Dispers mineral oils, crude oil, fuel oil, lubricant oil, etc.

### How to use:

Spills on water:

If it is possible pump or skim oil spilled as much possible.

When as most of the spilled oil is removed apply DG Oil dispersant undiluted. For small spills use hand spray. It neccessery to white few minutes untill product reacts and disperse oil. Wash down oil spill with a high pressure unit. Tank cleaning:

Use diluted with water from 5 to 10%. Wash down with fresh water with a high pressure unit.

### Package available:

# DG Electro Cleaner product nr: 5120

### Non-conductive electro cleaner.

#### **Product description:**

DG Electro Cleaner is special solvent for removal of oil and grease from electrical machines, components, equipment etc. It not contains chlorinated solvents. DG Electro Cleaner is almoust odorless and has high flash point. It has quick action and penetration of cleaned elements. After cleaning there is any residues moisture residue. That product is non-corrosive for normal componets.

#### How to use:

DG Electro Cleaner has to be used only in ventilated areas. It must be used udiluted. It can be applied by brush, swab or by spraying the cleaned parts. That product can be used by immersion bath for cleaning extremely fouled elements. Remained solvent can be evaporated by using compressed air.

#### Note:

Never use product on a running generator or motor.

#### Package available:

10,20 or 25 liters canister

# DG Air Cooler Cleaner product nr: 5112

### Product for cleaning of Diesel Engine charge air coolers

#### **Product description:**

DG Air Cooler Cleaner is special waterbased, degreasing formula for cleaning diesel Air Coolers and Turbochargers. Product contains liquid blend of solving, cleaning and anti-corrosive agents. DG Air Cooler Cleaner cleans air side of the charge air cooler,turbo-charger and scavenging air system, by dissolving any lube-oil and fuel-oil contamination as well as contaminations entered via the air inlet. Product contains no chlorinated or aromatic hydrocarbon solvents, nonyl phenol ethoxylates or other substances harmful to the environment.

#### How to use:

DG ACC is suitable for all types of diesel engines. Product have to be used mixed with fresh water (10-30% of DG ACC - depending on severity of the contamination). The following table shows amount of solution required to clean an air cooler. For proper calculation find the cross-sectional area of the cooler and use 3 litres of cleaning solution ) per square metre or as table below. This is based on one injection every 24 hours.

#### Engine HP

6,000 to 12,000 12,000 to 24,000 24,000 or more 20% of DG ACC mixed with fresh water

)	3 litres
00	4.5 litres
	6 litres

**Bath Cleaning** - Put parts to be cleaned into a bath of undiluted DG Air Cooler Cleaner and allow deposits to be broken (time of bathing - 3-12 hours). After cleaning, rinse the surface with a high pressure unit.

### Package available:

# DG Carbon Remover product nr: 5103

### Powerful water based , caustic solvent for removing carbon deposits.

#### **Product description:**

DG Carbon Remover is water based , powerful liquid solvent for removing all kind of carbon deposits. Very quickly solve deposits, therefor eliminates need for hard scraping. DG Carbon Remover is not flammable.

#### How to use:

Put the cleaned elements in a steel bath and filled with DG Carbon Remover. Wait untill all carbon deposits will be soaked. Take out cleaned components out of bath and wash with fresh water or powerfull waterjet..

#### Package available:

20 or 25 liters canister

# DG Multicleaner ECO product nr: 5104

### Universal cleaning agent and degreasant

#### **Product description:**

Multicleaner Eco is a safe, water-soluble, biodegradable cleaning agent. As it contains potent water softeners, it successfully removes the toughest dirt. Ideal for hand, steam and immersion cleaning. You can safely use Multicleaner Eco on most surfaces, including glass, metal, ceramics and plastics. It removes grease, oils, tar, asphalt, inks, wax, lubricants, adhesives, and many other types of tough dirt and grime leaving a fresh scent of lemon.

#### How to use:

Apply with nozzle foam making appliances, a brush, a cloth, an atomiser or use in immersion cleaning.

**General cleaning and degreasing:** use the product undiluted or dilute it with water at 1:1 to 1:10 ratio depending on how dirty the surface is.

**Steam cleaning:** allowable dilution ratios 1:10 - 1:50.

**Removing grease, oils and fats:** use the product undiluted or dilute it with water at a maximum ratio of 1:5.

**Immersion cleaning:** dilute with water a ratio of 1:2-1:5. After cleaning, rinse the surface.

#### Package available:

# Acidic liquid descaling agent.

#### **Product description:**

Concentrated liquid for removal of calcification resulting from the long Action hard water. Fluid has excellent cleaning properties and chelating agents. It leaves the surface clean without treaks. For cleaning: windows, walls, washing machines, dishwashers and other surfaces. Use only acid-resistant surfaces.

#### How to use:

**1.** Dilute formulation in a ratio of 1: 3 to 1:15 with water depending on the degree of calcification of the surface. **2.** Apply to the cleaned surface and wait for 30 seconds to 2 minutes. **3.** If necessary, gently scrub. **4.** Rinse with clean water.

### Package available:

20 or 25 liters canister

# DG Rust Remover product nr: 5201

# Acidic liquid for rust and stain removal.

#### **Product description:**

Concentrated, highly efficient formulation, containing phosphoric acid and surfactants, for removing rust from surfaces made of steel and cast iron. It contains substances facilitating the penetration of rust what accelerating the the operation. It also removes tarnish from non ferrous metals. Rust Remover can be also used for cleaning and brightening aluminium and copper and removing limescale. Formulation is non-flammable. Use only on acid-resistant surfaces.

#### How to use:

Use immersion or impose using a brush.

For thick rust raid item must be pre-cleaned with a wire brush.

Rusty object immersed for 2 to 20 minutes in a vessel resistant to acids (preferably glass or plastic) or smear brush. After removing the rust cleaned object allow to dry or wash water and dry.

For cleaning aluminium or copper use solution from 10% to 35% with water. Rinse off cleaned surface after maximum 5 min.

Additional Notes: In the case of sedimentation

slightly heat eg. in a pan of warm water and mix

untill complete disappearance of the solid.

Rust Remover have to be always used in a plastic or glass bucket.

#### Package available:

# Acidic liquid product for cleaning separators discs and bowls

#### **Product description:**

DG Separator Cleaner is acid based, powerful liquid blend of acids, surfactants and emulsifying agents. Product removes carbonized oil and lube oil from discs and bowls in separators. DG Separator Cleaner is non-flammable, contains no petroleum solvents. It passivates stainless steel.

#### How to use:

DG Separator Cleaner can be used undiluted or mixed with fresh water (20% solution) depending of severity of contamination. Heating of product is not necessary but higher of temperature of product increase cleanig process. Remove the disc from separator and soak in cleaning solution of DG Separator Cleaner. Let the product act for 30 minuts up to maximum of 2 hours. There have to be enough space between cleaned elements. After cleaning process rinse cleaned elements with fresh waterjet.

Additional Notes: In the case of sedimentation slightly heat eg. in a pan of warm water and mix untill complete disappearance of the solid. Rust Remover have to be always used in a plastic or glass bucket.

### Package available:

20 or 25 liters canister

# DG Alu Brite product nr: 5204

# Acidic cleaning agent.

#### **Product description:**

Concentrated acidic complex of acid, softeners, emulsifiers for cleaning oxidised surfaces of aluminium, removal rust from surfaces made of steel and cast iron and removal carbonized fumes. Fluid has excellent cleaning properties and chelating agents. It leaves the surface clean without streaks. Use only on acid-resistant surfaces.

#### How to use:

Use undilted or mixed with fresh water.

1. For removal of oxidation or tarnish on copper or brass use solution from 20% to 35% with water and leave to react for 15-30 minutes.

2. For brightening of aluminium use solution from 15% to 50% with water and leave to react for 5-15 minutes.

3. For removal of rust use undiluted product. If necessary, gently scrub rusted surface. leave to react for 30-60 minutes. Rinse with clean water and dry surface.

Note: Always add the acid to the water, not reverse.

### Package available:

# Polymer-based product for the controling of scaling in water evaporators

#### **Product description:**

DG Vapor Control is a safe, water-soluble, concentrated liquid for controlling scale and foam in evaporators. Product is blend of polymer and antifoam agents. DG Vapor Control is reducing foaming and maintains optimum plant performance.Productr reduces downtime and maintenance. Does not corrode stainless steel, carbon steel, copper alloys, glass, rubber, plastics, painted surfaces, aluminium and aluminium alloys. For removing deposits of scale more than 2mm use DG Descaler L.

#### How to use:

DG Vapor Control is diluted with seawater and fresh water. Standard dosage is 25-45 ml per ton of distillate. Product has to be continuously injected into the evaporator for the prevention of scaling in seawater evaporators. The total dosage of DG Vapor Control to be used depends on the capacity and the operating conditions of the evaporator. The product should be injected via the evaporator inlet or the salt water supply line.

#### Package available:

20 or 25 liters canister

# DG Diesel R011 product nr:5302

# Liquid corrosion inhibitor for use in closed cooling and heating water systems.

#### **Product description:**

Safe, water based, biodegradable product for protection of closed heating and cooling systems. Effective protection against deposits and corrosion stone. Compatible with glycol used for frost protection. It does not contain corrosive. It does not contain phosphates. Working in a wide temperature range.

#### How to use:

Avoid contact of neat product with zinc and aluminium. R011 should be dosed to a suitablepoint in the system. If the expansion tank is used then adequate circulation must be assured. Place the probe in a canister or pour an appropriate amount of liquid into the device. Dosage: The dosage should be set in the dependencies water hardness in the range from 5 ml / 0dH3 to 10ml / 0dH3.

#### Package available:

# DG Condesate Control product nr:5303

### Concentrated liquid corrosion control agent for condensate systems

#### **Product description:**

DG Condensate Control is a liquid product amines, anti-foam agent, scale controling agent for corrosion control in steam and condensate systems water systems in boilers of all pressures. Easy for use and determine level of treatment.

#### How to use:

DG Condesate Controle is tested for pH to determine the dosage level. The pH limits are 8.2-9.5. For an average system e.g. 1m3, the dosage is approximately 0.05 litr for 24 h (50 ml).

#### Package available:

20 or 25 liters canister

# DG Anti-Foluling Agent product nr:5304

### Concentrated liquid antifoulant and corrosion inhibitor

#### **Product description:**

DG Anti-Foluling Agent is a liquid product designed to prevent from erosion, corrosion and growth of sealife organismus (microorganismus, plants, algae etc.) in seawater cooling systems. The product also acts as a corrosion inhibitor.

#### How to use:

It is recommended to clear seawater cooling system prior to start using DG Anti-Foluling Agent treatment. Dosage: It is recommended to dose 0.5 litre of DG Anti-Foluling Agen

It is recommended to dose 0,5 litre of DG Anti-Foluling Agent for every 100 tons of seawater flow in cooling system per hour.

Water Flow (ton/hour) Anti-Foluling Agent (liters/hour)

,	,	0,5
		1,0
		1,5
		2,0
	·	

#### Package available:

# DG Biver HD product nr:5401

### Powerful caustic based alkaline cleaning agent

#### **Product description:**

Biver HD gathers the best of nowadays raw parts technology. All detergent substances such as: anionic, non-ionic surfactants, sequestering, inhibiting, wetting agents, alcali, are included in this product in high concentration and allow to use it with very high dilutions. The product is a liquid with good viscosity completely homogeneous and easly water soluble. It has numerous cleaning applications: removal of vegetable, fish, animal oils and fats ,greases, waxes, sludge, soot, carbon deposits, dirt and grime. Also for cleanig after coal and pet coke.

#### How to use:

Before cleaning with Biver HD it is recommended to pre-wash with hot water. Apply with nozzle foam making appliances, a brush, a cloth, an atomiser or use in immersion cleaning.

General cleaning and degreasing: Apply Biver HD mixed 10–25% (ratio 1:9 to 1:3) in water, using spray foam equipment. Leave for 10–25 minutes. The surface remains wet. Wash down with a high pressure unit. For best results, direct the high pressure jet at the lowest parts of the hold first and work upwards. Repeat the procedure if necessary.. Steam cleaning: allowable dilution ratios 1:20 - 1:100. Immersion cleaning: dilute with water a ratio of 1:10-1:50.

After cleaning, rinse and dry the surface.

#### Package available:

20 or 25 liters canister

# DG Tank Cleaner product nr:5402

### Concentrated, emulsifying cleaning agent

#### **Product description:**

DG Tunkcleaner is concentrated product, water-based,formulation based on petroleum solvents, emulsiyfing agents and surfactant. Product is used for general removal of most oil and fats in cargo, storage tank and also grease from soiled surfaces. Product can be used on steel, plastic materials, epoxy and zinc coatings. Dispers mineral oils, crude oil, fuel oil, lubricant oil, etc.

#### How to use:

Use 10-25% solution of DG Tankcleaner with heated water (35-55°C). Pump out of remaing oil or fuel. Prewash tank with hot water (about 45°C-55°C) except crude oil which prewash with cold water.

For Direct Injection Method use undiluted Tankcleaner with rate of 0,2 litre per 100 liters of wash water. Cleaning time is 3-10 hours. When cleaning is completed drain off the cleaning solution. Rinse tank with fresh water untill water runs clean from lower connection. For Hand Cleaning use undiluted product directly on to framesalls, bulkheads, stringers useing spray pump. After cleaning wash out with high pressure water systems.

#### Package available:

# DG Tank Cleaner Plus product nr:5403

# Concentrated, emulsifying cleaning agent

#### **Product description:**

DG Tunkcleaner is concentrated product, water-based,formulation based on petroleum solvents, emulsiyfing agents and surfactant. Product is used for general removal of most oil and fats in cargo, storage tank and also grease from soiled surfaces. Product can be used on steel, plastic materials, epoxy and zinc coatings. Dispers mineral oils, crude oil, fuel oil, lubricant oil, etc.

#### How to use:

Use 10-25% solution of DG Tankcleaner with heated water (35-55°C). Pump out of remaing oil or fuel. Prewash tank with hot water (about 45°C-55°C) except crude oil which prewash with cold water.

For Direct Injection Method use undiluted Tankcleaner with rate of 0,2 litre per 100 liters of wash water. Cleaning time is 3-10 hours. When cleaning is completed drain off the cleaning solution. Rinse tank with fresh water untill water runs clean from lower connection.

For Hand Cleaning use undiluted product directly on to frames walls, bulkheads, stringers useing spray pump. After cleaning wash out with high pressure water systems.

#### Package available:

20 or 25 liters canister

# DG Rust Remover product nr:5201

### Acidic liquid for rust and stain removal.

#### **Product description:**

Concentrated, highly efficient formulation, containing phosphoric acid and surfactants, for removing rust from surfaces made of steel and cast iron. It contains substances facilitating the penetration of rust what accelerating the the operation. It also removes tarnish from non ferrous metals. Rust Remover can be also used for cleaning and brightening aluminium and copper and removing limescale. Formulation is non-flammable. Use only on acid-resistant surfaces.

#### How to use:

Use immersion or impose using a brush.

For thick rust raid item must be pre-cleaned with a wire brush.

Rusty object immersed for 2 to 20 minutes in a vessel resistant to acids (preferably glass or plastic) or smear brush. After removing the rust cleaned object allow to dry or wash water and dry.

For cleaning aluminium or copper use solution from 10% to 35% with water. Rinse off cleaned surface after maximum 5 min.

Additional Notes: In the case of sedimentation

slightly heat eg. in a pan of warm water and mix

untill complete disappearance of the solid.

Rust Remover have to be always used in a plastic or glass bucket.

Package available: 20 or 25 liters canister

ank Cleaning

# Save, water based general purpose degreaser

### **Product description:**

DG Enviro Cleaner is neutral, safe, multi purpose cleaner and deagreser based on natural orange solvent extracts and andvanced surfactant formulation. It may be used successfully for most marine and industrial applicatons. It can be used for cleaning and deagresing deck and machinery. Easly removes greasy grime, oil, diesel spillages, sludge, wax, carbon deposits.

#### How to use:

Apply with nozzle foam making appliances, a brush, a cloth, an atomiser or use in immersion cleaning.

**General cleaning and degreasing:** use the product undiluted or dilute it with water at 1:1 to 1:10 ratio depending on how dirty the surface is.

Steam cleaning: allowable dilution ratios 1:10 - 1:50.

**Removing grease, oils and fats:** use the product undiluted or dilute it with water at a maximum ratio of 1:5.

**Immersion cleaning:** dilute with water a ratio of 1:2-1:5. After cleaning, rinse the surface.

### Package available:

20 or 25 liters canister

# DG Multicleaner Forte product nr: 5404

### Universal, alkaline, high foam cleaner

#### **Product description:**

Multicleaner Forte is a alkaline water-soluble, biodegradable cleaning agent with high foam effect. As it contains potent water softeners, it successfully removes the toughest dirt. Ideal for hand, steam and immersion cleaning. You can safely use Multicleaner Forte on most surfaces, including glass, metal, ceramics and plastics. It removes grease, oils, tar, asphalt, inks, wax, lubricants, adhesives, and many other types of tough dirt and grime leaving a fresh scent of lemon. Use only on a alkaline resistant surfaces.

#### How to use:

Apply with nozzle foam making appliances, a brush, a cloth, an atomiser or use in immersion cleaning.

**General cleaning and degreasing:** use the product undiluted or dilute it with water at 1:5 to 1:50 ratio depending on how dirty the surface is.

Steam cleaning: allowable dilution ratios 1:10 - 1:50.

**Removing grease, oils and fats:** use the product undiluted or dilute it with water at a maximum ratio of 1:5.

**Immersion cleaning:** dilute with water a ratio of 1:5-1:20. After cleaning, rinse the surface.

### Package available:

# DG Drain Solution product nr: 5502

### Liquid, perfumed mixture of aerobic bacteria for plumbing systems.

#### Product description:

DG Drain Solution is highly concentrated, aerobic bacteria-enzymes mixture to remove blockages, keep clean and cure odour from all kind of plumbing systems (sewage tanks, septic tanks etc.). The enzymes convert the harmful organic matter into smaller particles, that are consumed by bacteria. The bacteria convert the sludge into carbon dioxide and water. DS applied to sanitary pipelines prevents them from clogging.

#### How to use:

DG **1.** The start-up dosage is 1 liter of Drain Solution per 1.000 liters of tank capacity. Add the product directly to the holding tank and allow a minimum of 24 hours after this initial application for the system to become properly activated. **2.**Dosage should be made daily if used as a tankcleaner in amounts of 0,25 liter per 1.000 liters of tank capacity. **3.**When used as a cleaner about 100 ml of product should be applied to each bowl, sink and drain in the same manner as with any conventional type cleaner.

**Note:** Contains Limonene. May cause an allergic reaction Protect from freezing and keep under 40°C. Contains amylase and protease.

### Package available:

5 liters canister

# DG Hand Cleaner product nr: 5503

# Cleaning gel for soiled hands

#### **Product description:**

DG Hand Cleaner is a speciall product for cleaning heavily soiled hands. It removes oil, grease, tar, dirt, grease, grease dust, rust, oil, paints, varnishes, adhesives. Formula of Gel contains elements protecting skin against dryness. Synthetic abrasive in formula improves the mechanical efficiency of cleaning. Easy to rinse. Dermatologically tested. Environmentally friendly and biodegradable.

#### How to use:

Use 2-3 ml of cleaning gel onto the dry, soiled skin.Rub until the dirt dissolves. Rinse off with hot or cold water. Next dry thands with a towel or tissue.

### Package available:

5 liters canister

# Water-based cleaning agent for ultrasonic cleaning.

#### Product description:

DG Ultrasonic cleaner contains special low-foaming detergents and softenig and complexing agent for use in ultrasonic bath. Product can not be used for cleanig part made of zinc, galvanized parts and magnesium alloys. Product is free of hydrocarbon solvents.

#### How to use:

DG Ultrasonic cleaner should be used in 5-20% solution in water. Best result are obtains if temperature is between 55 - 75 °C. Cleanin time is 5-30 minutes, but could be long if necessary. After cleaning period take out elements of bath and spray with high-pressue fresh water. If the cleaning solution is not heavily cotaminated can be used again.

#### Package available:

5,10, 20 and 25 liters canister

# DG CitraSolv EX product nr: 5501

### **Strong Industrial Degreaser**

#### **Product description:**

Highly concentrated, water-based, biodegradable formulation for typical industrial applications. Contains strong plasticizers thus has the ability to intensive cleaning even stubborn dirt. Effective when hand washing and steam and immersion. Safe and effective for most surfaces: glass, metal, ceramics, plastic. Contains strong orange terpenes. Removes: grease, oil, tar, inks, waxes, polishes, adhesives and other heavy dirt. It has a pleasant smell.

#### How to use:

Apply with a brush, rag, spray or use immersion. General cleaning and degreasing: dilution of 1:1 to 1:20 with water.

Steam cleaning: Dilution 1:20 to 1:100 with water.

Cleaning: oils, grease: Dilution max.1: 10.

Cleaning Immersion: Dilution 1:4 to 1:10 of water.

It is recommended to rinse with warm water to accelerate drying. Long-term effects can damage aluminum alloys. Provide adequate ventilation indoors.

### Package available:

20 and 25 liters canister

### Powerful water based cleaner and degreaser

#### **Product description:**

DG Freezer Cleaner is water based , powerful, slightly alkaline cleaning agent for washing very greasy surfaces especially in fish vessel. Product is used for cleaning reefer cargo holds, freezer rooms, storage spaces and others food industrial areas. It is effective even in the presence of great numbers of organic materials such as blood, fish oil, proteins etc. DG Freezer Cleaner is ideal for use in the devices of active foam. Product is not flammable.

#### Directions for use:

Use dilution with fresh water depending on the degree of soiling.

1. For general purpose cleaning use 1–5% solution with fresh water. Apply solution by spray, brush, sponge or rag to the cleaned surface.

2. For cleaning heavy soiled surfaces use 5–20% solution with fresh water.

Apply solution by low pressure spray onto the soiled surfaces,

and next wash down with a high pressure unit.

### Package available:

20 or 25 liters canister

# DG AntiFreeze product nr: 5506

Glycol-based agent with low freezing point, -37°C

An AntiFreeze is an additive which lowers the freezing point of a water-based liquid and increases its boiling point. AF has desirable thermal properties, including a high boiling point, low freezing point, stability over a wide range of temperatures, and high specific heat and thermal conductivity. It also has a low viscosity and, therefore, reduced pumping requirement.

### Package available:

25 liters canister

# DG Oil absorbent pads Regular product nr: 5601

#### **Product description:**

Oil only absorbent - pads 0,40m x 0,50m - 200 pcs .Sorbent only absorbing oils , crude oil and other petroleum products. It does not absorb water and floats on the surface even after full saturation the erased substances. The product is intended for use inside and outside the premises, all surfaces and on the water.

#### Technical data sheet

Weight: 170 g/m2 - Regular Sonic bonding: yes Fine Fibre Layer: no Material: polipropylene Certificate PL-PZH: PZH/HT-2797/2013

#### Trade units:

retail: bale - 200 pcs. wholesale: pallet 100x120x210 - 36 bales per 100 pcs. Pads dimensions 40 cm x 50 cm

# DG Oil absorbent pads Medium product nr: 5602

#### **Product description:**

Oil only absorbent - pads 0,40m x 0,50m - 100pcs. Sorbent only absorbing oils , crude oil and other petroleum products. It does not absorb water and floats on the surface even after full saturation the erased substances. The product is intended for use inside and outside the premises, all surfaces and on the water.

#### **Technical data sheet**

Weight: 240g/m2 - Medium Sonic bonding: yes Fine Fibre Layer: no Material: polipropylene Certificate PL-PZH: PZH/HT-2797/2013

#### Trade units:

retail: bale - 100 pcs. wholesale: pallet 100x120x210 - 36 bales per 100 pcs. Pads dimensions 40 cm x 50 cm

# DG Oil absorbent pads Premium product nr: 5603

#### **Product description:**

Oil only absorbent - pads 0,40m x 0,50m - 100 pcs. Sorbent only absorbing oils , crude oil and other petroleum products. It does not absorb water and floats on the surface even after full saturation the erased substances. The product is intended for use inside and outside the premises, all surfaces and on the water.

#### Technical data sheet

Weight: 350 g/m2 - Premium Sonic bonding: yes Fine Fibre Layer: no Material: polipropylene Certificate PL-PZH: PZH/HT-2797/2013

#### Trade units:

retail: bale - 100 pcs. wholesale: pallet 100x120x210 - 36 bales per 100 pcs. Pads dimensions 40 cm x 50 cm

# DG Oil sorbent roll Medium product nr: 5604

#### **Product description:**

Oil only sorbent - roll 0,76m x 46m .Sorbent only absorbing oils , crude oil and other petroleum products. It does not absorb water and floats on the surface even after full saturation the erased substances. The product is intended for use inside and outside the premises, all surfaces and on the water.

#### Technical data sheet

Weight: 240 g/m2 - Medium Sonic bonding: yes Fine Fibre Layer: no Material: polipropylene Certificate PL-PZH: PZH/HT-2797/2013

#### Trade units:

retail: roll 0,76m x 46m.

#### Product description:

Unisorbent is a mineral sorbent, granulated, with a grain size of 0.5 - 1.0 mm, designed to remove all liquid substances from the surface - oils, fuels, other petroleum products, fats, lubricants, coolants and water. The sorbent also absorbs all chemicals - acids, alkalis and solvents. The exception is hydrofluoric acid. Unisorbent is natural, chemically inert, non-flammable, harmless and environmentally friendly.

#### Application:

Unisorbent designed for use in all places where there is a risk of leakage of liquid substances. **Physical properties and composition:** 

Form: solid, granulate, Color: red-brown; Odor: odorless; The grain size: 0.5mm - 1mm; pH: 5.5; Bulk density: 480 g / l; Solubility in water: insoluble; **Basic composition:** SiO2: 75%

Al2O3: 10% Fe2O3: 7% H2O: 2%

# Package available:

5 kg bucket or 20 kg bag

# DG SOPEP KIT 120 L product nr: 5606

### Marine Kit for Oil Spills

#### **Product description:**

**DG SOPEP** Spill Kit is fully compliant with regulations for onboard spill containment and recovery equipment. This kit is efective for fuels, oils, hydraulic fluids or any other liquid spill or leak that occurs in a marine environment. Oil sorbents absorb only oils, crude oil and other petroleum products. They do not absorb water and float on its surface even after full absorption with removed substances. Sorbents is for use outdoors and indoors, on all surfaces and on water. Safety Kit is ready for immediate use in emergency situations.

#### Kit Components:

- 120L container on wheels
- oil mat SMOC4050 50 pcs.
- oil sleeve SZO8120 8 pcs.
- SPO4025 oil pad 4 pcs.
- PROFI-SORB Plus 10g bulk sorbent;
- Protective goggles 2 pcs.
- Protective gloves 2 pairs;
- Protective suit 2 kpl.
- half mask 2 pcs.
- waste bag 120L 3 pcs.

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