



The effective and friendly way of cleaning



## **Biomex HDI**

We would like to present the state of the art Biomex HDI (concentrate) product, which is used for washing, cleaning and degreasing in many fields of fuel industry, machine building, food processing, as well as in aviation, army, civil defense, public cleaning services, road maintenance services, etc. The Biomex HDI production process has been based on the latest technology in the alkaline chemistry. Unlike conventional detergents, it is extremely effective and yet tender. It degreases all surfaces without causing damage or corrosion and still it is 100% biodegradable.

Biomex HDI meets or exceeds the specifications: BOEING D6-1 Revision N – Exterior and General Cleaners, Douglas Aircraft Company Customer Service Document CSD#1, AMS 1523 Cleaner for exterior Aircraft Surface and AMS 1533A Cleaner for Exterior Aircraft Surfaces. (Approved by SMI, Inc Miami, Florida 33186-6401 USA) Biomex HDI is a water based biodegradable product, not flammable, safe in spaces with fire or explosion hazard. (see MSDS)

Biomex HDI is a universal product - its effectiveness and applicability depends on the concentration, time of operation and cleaning techniques. It is suitable for repeated use in immersion, ultrasonic and bubble washers, which significantly reduces costs of cleaning and degreasing.

### **Benefits**

- ✓ Economy;
- ✓ Biodegradability;
- ✓ It does not oxidize metal surfaces, including non-ferrous metals, such as aluminium, copper;
- ✓ Innocuous to plastics and rubber;
- ✓ Harmless to painted and varnished surfaces;
- ✓ Makes surfaces antistatic.

### **Specification**

- ✓ The product is not flammable, contains no solvents, bleaches, chlorine, sodium, ammonia, NTA and EDTA phosphates, or acids;
- ✓ It is non-toxic, non-corrosive, safe for all surfaces;
- ✓ Suitable for all cleaning (manual, immersion, pressure, active foam and gel) methods.

### **Product released as ADR, IMDG, ICAO / IATA**

## **Biomex BIOX 256**

This is a special surfactant, solvent-free, which was a combination of emulsifiers especially organic compounds lowering the surface tension. Perfectly removes stubborn dirt and grease.

- ✓ Economics;
- ✓ Biodegradable;
- ✓ Do not oxidized metal surfaces, including non-ferrous metals eg. Aluminum, copper;
- ✓ Do not harmful to plastics and rubber;
- ✓ Biocompatible for painted and varnished;
- ✓ Antistatic surface.

### **General information**

It is a means which create Biomex HDI was used. In the production process has been enriched with corrosion inhibitors. These compounds make Biomex BIOX 256 ideal cleaner for weapons, aircraft and other metal parts before washing a simultaneous corrosion protection. An additional feature of the product is the generation after the application of the antistatic layer to prevent adherence of dust and dirt.

SMI center has been approved Inc. (Miami, USA) examining the materials used in aviation by tests: BOEING D6-17487 REVISION N – exterior cleaning and general, DOUGLAS AIRCRAFT COMPANY CUSTOMERS SERVICE DOCUMENT CSD # 1, AMS 1537 CLEANER.

According to the European Regulation on detergents (EC) No 648/2004 is classified as a biodegradable.

### **Characteristic**

- ✓ The product is non-flammable, contains no solvents, bleach, chlorine, sodium, ammonia, phosphate, NTA and EDTA or acid;
- ✓ Non-toxic, non-corrosive, safe for all surfaces;
- ✓ Suitable for all cleaning methods (manual, immersion, pressure, active and gelling foam).

**ATTENTION! In order to achieve the effect of corrosion, do not rinse the surface with water defatted.**

**Product released as ADR, IMDG, ICAO / IATA**

## **Biomex Cleaner Extra**

This is an alkaline degreaser properties developed for degreasing and cleaning in heavy industry. The basis for the creation of Biomex Cleaner Extra was Biomex HDI, which has been enhanced with additional surfactants increase the cleaning properties. There is an optimum mixture of measures to reduce the surface tension, created high performance emulsifiers and surfactants.

- ✓ Safely remove oil stains;
- ✓ Removal of deposits, char and dirt all sorts of origin;
- ✓ Biodegradable;
- ✓ Simple application;
- ✓ Does not contain chlorine, petroleum solvents, bleach, ammonia, caustic agents and phosphates;
- ✓ Non-flammable;
- ✓ Ideal alternative to dangerous drugs and other harmful chemicals;
- ✓ Non-corrosive.

### **General information**

Biomex Cleaner Extra was created with the aim of removing carbon deposits and char with aluminum pistons, engine blocks and other engine components. Best results are achieved when using ultrasonic bath. Biomex Cleaner Extra its application is also on board ships, heavy vehicle fleet washing, oil rigs and mining where he successfully and compliance with all safety standards can be used in explosion hazardous areas, because it is non-flammable. The temperature range in which it can be used from +5 C to + 75C. Always remember that heat, in this case mixing with hot water preparation improves the cleaning properties.

- ✓ According to the European Regulation on detergents (EC) No 648/2004 is classified as a biodegradable;
- ✓ The product can be successfully used for cleaning buildings after fires, removes charring, neutralizes odors.

### **Application**

- ✓ Ultrasonic cleaning;
- ✓ Degreasing in heavy industry;
- ✓ Pressure Washing.

**Product released as ADR, IMDG, ICAO / IATA**

## **Biomex Power Cleaner**

We would like to present the state of the art Biomex Power Cleaner product, which is used for washing, cleaning and degreasing. The Power Cleaner production process has been based on the latest technology in the alkaline chemistry. Unlike conventional detergents, it is extremely effective and yet tender. It degreases all surfaces without causing damage or corrosion and still it is 100% biodegradable. Power Cleaner is a universal product - its effectiveness and applicability depends on the concentration, time of operation and cleaning techniques. Power Cleaner is an environmentally safe cleaner for thoroughly cleaning all surfaces. Its super active formula guarantees an optimal deep cleaning of polished and structural surfaces. Power Cleaner is especially suitable for the cleaning of all washable surfaces, e.g.: caravans, boats, campers, swimming pools, jet ski.

### **Benefits**

- ✓ Economy;
- ✓ Biodegradability;
- ✓ It does not oxidise metal surfaces, including non-ferrous metals, such as aluminium, copper;
- ✓ Innocuous to plastics and rubber;
- ✓ Harmless to painted and varnished surfaces;
- ✓ Makes surfaces antistatic.

### **Specification**

- ✓ The product is not flammable, contains no solvents, bleaches, chlorine, sodium, ammonia, NTA and EDTA phosphates, or acids;
- ✓ It is non-toxic, non-corrosive, safe for all surfaces;
- ✓ Suitable for all cleaning (manual, pressure) methods.

### **Simply too use**

- ✓ Biomex Power Cleaner can be used in any washing technology : manual and mechanical washing, pressure washers .
- ✓ 10-20% concentrate concentration in water: for heavy dirt;
- ✓ 5-10% concentrate concentration in water: for light dirt;
- ✓ 1% concentrate concentration in water: for cleaning wooden floors, doors, windows;
- ✓ The glossier the cleaned surface is, the lower concentration of the product is

### **Product released as ADR, IMDG, ICAO / IATA**

## **DCP FC 110**

The effective and friendly way of cleaning

### **Characteristics**

- ✓ DCP® FC 110 is an additive with an antifoam effect for all foaming DCP® products;
- ✓ Extremely efficient;
- ✓ Contains silicones (Not useful in applications for painting industry);
- ✓ Stable in all Biomex Products.

### **User's instruction**

- ✓ Add Biomex ANTIFOAM (undiluted) to the cleaning liquid in proportion of 10 ml per 100 liters cleaning liquid, depending on the procedure;
- ✓ When foam occurs again, re-dose slightly.

## **Biomex 111/2**

Biomex 111/2 is a degreaser with alkaline properties (PH 10.6) designed to remove char and carbon deposits. The basis for the creation of Biomex 111/2 was Biomex HDI, which was enriched with additional surfactants (acid) increasing the cleaning properties. It is an optimal blend of surface tension reducing agents, created from high-performance emulsifiers and surfactants.

### **Characteristics**

- ✓ Removing carbon deposits, char;
- ✓ Biodegradable;
- ✓ Simple to use;
- ✓ Free of chlorine, petroleum solvents, bleaches, ammonia, caustic agents and phosphates;
- ✓ Not flammable;
- ✓ An ideal alternative to hazardous chemicals and other chemical preparations harmful to health;
- ✓ Does not cause corrosion;
- ✓ May cause blackening of metal parts.

### **Application**

- ✓ Ultrasonic cleaners;
- ✓ Mechanical washing;
- ✓ Hand washing;
- ✓ Pressure washing.

### **Application in the repair industry (automotive, air, military, railway, heavy industry)**

- ✓ Removing carbon deposits, char: aluminum pistons;
- ✓ Head cleaning;
- ✓ Washing the turbines;
- ✓ Washing the DPF filters;
- ✓ General removal of deposits, char from engine parts and other elements in the heat industry;
- ✓ Information on transport.

**Product released as ADR, IMDG, ICAO / IATA**

Sectors / subsectors	Application	Concentration	Actions
1. Fuel suppliers / petrol stations	Fuel pumps	10%	Spray, rinse, dry.
	Petrol pumps	5%	Apply, scrub, spray with (hose)
	Trucks	1-10 %	Spray, brush, rinse, dry.
	Fuel oil stains	10%	Spray, wait for 15 minutes, spray with
	Floors	5%	Apply, wait, remove dirt or dust.
2. Fire brigades	Very filthy parts	10-20%	Spray, wipe with a sponge or brush.  <b>DO NOT ALLOW THE PRODUCT TO DRY UP</b>
	Slightly filthy parts	5%	Clean with a sponge or brush, rinse well,
	Indoor working surfaces and technical maintenance facilities (cabinets, display cabinets, walls, etc.)	5%	Spray evenly, wait (rinse full-gloss surfaces), removed with a clean, water-absorbing cloth.
	Fire trucks	10-20%	Spray evenly, wait for a moment, rinse, dry.
	Removing (diesel and engine) fuel layer and emulsifying chemicals on road surfaces	20-30%	Spray evenly on the surface, wait for a moment. If necessary, brush, rinse with (hose) water.
3. Car washes	Car and company vehicle washing	1-3%	
	Insect removing	10-15%	Spray at least 2 minutes before the main
	Wheel cleaning	20-30%	Spray at least 2 minutes before the main
4. Garages	Floors by	10-15%	Apply, scrub very filthy surfaces, remove the product
	Engines	20%	Spray evenly the engine once cooled down. After about 5 minutes, peel off the dirt with steam (under pressure).
	General maintenance of machinery, moveable bridges, etc.	10%	Spray evenly, wait for a moment (rinse in case of full- gloss surfaces), remove with a clean, water-absorbing cloth.
	Parts	20%	
	Rims	20-30%	Spray evenly, scrub, rinse.
	Insects	10%	Spray evenly, do not allow to dry, wash with a sponge and a big amount of water, dry with a chamois.
	Internal padding / bad odours removing	10%	Spray, wait for 5 minutes, wipe with a cloth.  <b>Both spray and extract feature!</b>
	Windows	0,5-1%	Spray gently, wipe it dry with a clean, water-absorbing cloth.



Sectors / subsectors	Application	Concentration	Actions
5. Catering	Kitchen, general degreasing	10%	Spray evenly, wait for a moment (rinse in case of full- gloss surfaces), remove with a clean, water-absorbing cloth.
	Stoves, hoods, etc.	30-20%	Spray the stove walls, wait for 10 minutes, clean with a brush and rinse, spray the hood, clean with a brush or sponge, then wipe with a paper towel or a cloth
	Grills	50%	Spray, use steel wool, rinse thoroughly.
	Conventional ovens and microwaves, etc.	20%	Spray evenly, wait for a moment, rinse, dry.
	Cigarette residue removing	15%	Spray evenly, wait for a moment (rinse in case of full- gloss surfaces), remove with a clean, water-absorbing cloth.
	Floors	10-15%	Apply, scrub very filthy surfaces, remove the product.
	Carpeting	10-20%	<b>Both spray and extract feature!</b>
	Outdoor (wooden/synthetic) furniture	10%	Spray, wait for a moment, use a sponge, rinse and dry.
	Stainless steel counters	2-10%	Apply the product with a dampened cloth or sponge, rinse thoroughly.
6. Industry (in general)	High pressure washer: Cleaning large parts, molds, removing coarse- grained dirt, oil, grease (including graphite grease), washing conveyor belts, etc.	2-20%	Clean the coarse-grained dirt with the washer, then spray the product under low pressure, eventually wash the entire item under high pressure.  <b>20-80°C</b>
	Baths (part cleaning)	20%	Clean with a brush with water system (product connected)?  <b>Room temperature</b>
	Manual degreasing: (Cleaning equipment, parts, conveyors, etc.)	10-20%	Spray, allow the product to act inside, wipe with a sponge or rinse.  <b>Room temperature</b>
	Remove carbon from aluminium engine components engine blocks.	20%	In an ultrasonic washer: immerse, let it act for 2 Rinse if necessary.  <b>60-80°C</b>
	Degreasing, cleaning	5-20%	Spray evenly, wait for a moment (rinse in case of full- gloss surfaces), remove with a clean, water-absorbing cloth.
7. Chemical industry			
8. Plastics industry	Mold cleaning parts molding Solvent bath or without Removing oil and dirt from the plastic	5-20%	Spray, wait for a few rinse with (hose) water. Immerse, wait an amount of time, rinse if necessary.
	Removing oil and dirt from the plastic	2-10%	Spray, wait for a moment, remove with a clean, cloth. Rinse - if a striped mold.

Sectors / subsectors	Application	Concentration	Actions
<b>9. Metal processing</b>	Solvent baths (in general)	0,5-30%	Treatment time depends on the degree of soiling, surface texture, temperature, degreasing process, etc.
	Immersion (removing light oil contamination)	2-15%	Immerse <b>45-75°C</b>
	Ultrasonic washers (cleaning precision machine parts, molds, filters, light oil contamination)	1-10%	Immerse <b>45-75°C</b>
	Spray systems (removing lubricants, graphite ones, cleaning ball bearings)	2-10%	Rinse clean under pressure <b>60-80°C</b>
<b>10. Local authorities</b>	High pressure washer (cleaning large items, removing coarse-grained dirt, oil, lubricants, including graphite ones, etc.)	2-20%	Wash more coarse-grained dirt, treat under low pressure, rinse under high pressure. <b>20-80°C</b>
	Baths (part cleaning)	20%	<b>Room temperature</b>
	Manual degreasing (cleaning equipment, parts, road signs, lights, etc.)	10-20%	Spray, wait, remove with a clean, water-absorbing cloth or rinse. <b>Room temperature</b>
<b>11. Armed forces</b>	Fleet maintenance Very filthy parts Slightly filthy parts	10-20% 1-5%	Spray, use a sponge or rinse, dry. Rinse thoroughly and dry.
	Indoor working and technical facilities (cabinets, walls, etc.)	5-10%	Spray evenly, wait for a moment (rinse in case of full-gloss surfaces), remove with a clean, water-absorbing cloth.
	Technical	5-20%	Wash more coarse-grained dirt, treat under low pressure, rinse under high pressure. <b>20-80°C</b>
	Manual degreasing (cleaning equipment, parts, etc.)	10-20%	Spray, wait, remove with a clean, water-absorbing cloth or rinse. <b>Room temperature</b>
	Weapon cleaning	20% BIO 80% water	Spray or immerse, wait for a moment, wipe with a cloth brush. <b>To keep the preserving coating, do not rinse!</b>
	Daily and periodic maintenance	see cleaning companies	
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<b>14. Merchant marine and tourist</b>	Engine rooms, engines	10-20%	Spray evenly, wait for a moment, remove with a clean, water-absorbing cloth or rinse (high) pressure.
	Decks, removal of algae	2-20%	Spray or apply directly, scrub, rinse
<b>15. Painting companies</b>	Degreasing surfaces before primer application	10%	Spray evenly, remove dirt with a clean, water-absorbing cloth.
<b>16. Cleaning companies (general information)</b>	Daily maintenance: Floors, by hand	2-5%	Apply, scrub (if necessary), remove the product and dry
	Floor, mechanically	2-5%	Apply and scrub, scratch and dust.
	Stain cleaning	10-15%	Spray evenly, wait for a moment, remove dirt with a clean, water-absorbing cloth. <b>In case of high-surfaces, rinse water dry.</b>