

THE OIL AND CHEMICAL ADSORBENT



on water. Magic cotton. Wax. Environmental protection. Application-specific packaging. Leakage-Set. Waste v ste water treatment. Net boom. *Coalescence separator.* Oil-/Water separation. *Flood protection.* Water industry. barrier. Bilge water separator. Tank protection. Waste oil. Hydrophobic liquids. Process water. Oil platforms. Offsho icks. Wind energy plants. Immediate actions. Fleece booms. Blocks. Bulks. Pillows. Mats. Duct Cover. Oil ac il adsorbent. Diesel. Heating oil. Alcohols. Fiber. Innovation. Hydrophobic. Recycling. Waste reduction. Fuel value. ubstitute fuel. Treatment. *Disposal.* Cost minimizing potential. *Effectiveness.* Versatility. *Time saving.* Flexibility. Oil on water. Magic cotton. Wax. Environmental protection. Application-specific packaging. Leakage-Set. Wast et boom. *Coalescence separator*. Oil-/Water separation. *Flood protection.* Water industry. *Oil barrier.* Bilge water separator. *Ta* nk pro<mark>tection. Waste oil. Hydropho</mark>bic liquids. *Process water.* Oil platforms. Offshore. Locks. Wind energy i mmedia cks. Bulks. Pillows. Mats. Duct Cover. Oil adsorbent. Diesel. Heating **rsatility.** *Time saving.* **Flexibility.** Oil on water. **Magic cotton.** Wax. *En* inviror PURE d protection. Water industry. *Oil barrier.* Bilge water separator. Tank protectio OIL & CHEMICAL BINDER water. Oil platforms. Offshore. Locks. Wind energy plants. Immediate **ats.** Duct Cover. *Oil adsorbent. Diesel.* Heating oil. Alcohols. *Fibe*



ENVIRONMENTALLY FRIENDLY OIL AND CHEMICAL ADSORBENT

Hydrophobic wax cotton
Product adsorbs no water
Only pollutants are adsorbed
Pollutants are kept durably
Free of dust working

VERY HIGH AND FAST ADSORPTION

Adsorbs 6.55 times of its own weight
Certified by DEKRA Industrial GmbH
Registered in "list of approved absorbents" (Liste der geprüften Ölbindemittel)

PREVENTION AGENT

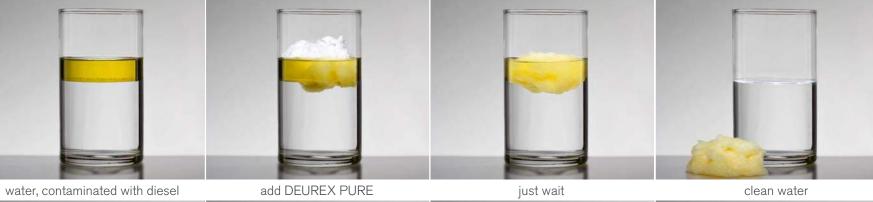
Product does not decay by environmental influences
 Floats durably even when saturated
 Helps to minimize and to avoid damages



DEUREX PURE is suitable for hydrophobic liquids, for oils and chemicals as well as alcohols. 1 kg of DEUREX PURE adsorbs 6.55 l of oil (DEKRA certified) very fast due to great surface of 3 m²/g. DEUREX PURE keeps the contaminants, does not adsorb any water and remains buoyant even when saturated.

DEUREX PURE can be removed without any residues left. It is recyclable and reusable. clean water





DEUREX PURE is suitable for hydrophobic liquids, for oils and chemicals as well as alcohols and surfactants.



add DEUREX PURE water*, contaminated with Toluol just wait clean water

lsopropanol**

add DEUREX PURE

just wait

complete adsorption

1 kg of DEUREX PURE adsorbs 6.55 I of oil (DEKRA certified) very fast due to great surface of 3 m²/g.

DEUREX PURE keeps the contaminants permanently, does not adsorb any water and remains buoyant even if saturated.

DEUREX PURE can be removed without any residues left. It is recyclable and reusable.

* The water has been dyed blue for better differentialibility.

** The alcohol (Isopropanol) has been dyed blue for better visibility.



APPLICATIONS

WATER TREATMENT

- · Purification plants
- · Filter technology
- · Coalescence separator
- · Bilge water oil removal

EMERGENCY MANAGEMENT

- Fire fighters
- \cdot Oil spill response
- · Flood management
- · Protection of buildings

ENVIRONMENTAL TECHNOLOGY

Soil decontamination
Remediation of contaminated sites

INDUSTRIAL APPLICATIONS

Refineries
Oil-bearing machines
Car washes
Filling stations
Oil platforms

WIND POWER PLANTS

 \cdot Oil safety collar protects against oil damages

WATER CONSERVATION AREAS

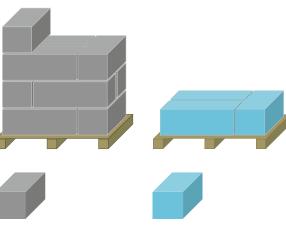
- $\cdot \, \text{Lakes}$ and rivers
- \cdot Rain storage reservoir
- · Barrage
- · Watergates
- \cdot Ports and Marinas

RECYCLING CONCEPT

WASTE AVOIDANCE

The high adsorption ratio reduces the amount of absorber down to $^1\!/_6$ compared to commercial granules. This causes much less waste.

RECOVERY OF 100 LITERS SPILLED OIL



ONE BAG GRANULES

- = 20 kg, difficult and dusty handling
 = 0.5 Liters/kg are
- absorbed
- = 200 kg, 10 bags à 20 kg Granules are required

ONE BAG DEUREX PURE

- = 5 kg, easy handling
- = no dust emission
- = 6.55 Liters/kg are adsorbed
- = 15 kg, 3 bags à 5 kg PURE are required

SEPARATION

Various methods allow the separation of adsorbed pollutant from DEUREX PURE. Both materials can be used again or can be disposed.

DISPOSAL

A typical oil-PURE-compound has a heating value of 45 MJ/kg. It is very attractive for thermal disposal.

WASTE OIL ORDINANCE

§ 2 - Reprocessing Priority

(1) The reprocessing of waste oils enjoys priority over other waste management processes insofar as no objective technological and economical restraints including those of an organizational kind preclude this.

TEST REPORTS

2.4. OIL-BINDER REQUIREMENT*

PARAMETER	UNIT	RESULT
Oil-binder requirement:		
(g) oil binder / 100g oil	g	19
(ml) oil binder / 100 ml oi	il ml	201
1 I oil binder binds	g oil	410
Calculated value	% by vol.	201
1 litre of oil binder binds:	litre	0.50
1 kg of oil binder binds:	litre	6.55
U .		
1 kg of oil binder binds:	kilograms	5.40

Classification criteria

Oil binder	
Туре I	
Type II	
Type III	

Oil-binder requirement max. 350 % by vol. max. 600 % by vol. max. 350 % by vol.





We undergo independent assessments. DEUREX PURE is certified by DEKRA Industrial GmbH and listed in the "List of approved absorbents". Do not hesitate to compare us. DEUREX PURE is also certified in other countries. Reports will be handed out upon request.

* Extract from official test report of DEKRA Industrial GmbH



OIL SAFE COLLAR (OSC) INCLUDING DEUREX PURE

· In cooperation with Rotor Rope GmbH



• The safe and simple system to avoid oil spills in wind turbines • Permeable for condensate and rain water

· Adsorbs hydraulic and gear box oil in case of technical malfunction

- · To minimize downtime
- · To reduce costs for cleaning

· To avoid expensive cleanup of oil spill and environmental damages





CLEANING UP THE OCEANS FROM PLASTIC DEBRIS

· In cooperation with ONE EARTH – ONE OCEAN e.V.



The environmental organization One Earth - OneOcean has set up the goal, to cleanup waters from plastic waste, but also from oil and pollutants. Vast carpets of plastic waste are floating on the oceans already today, the biggest one in the Pacific is as large as Central Europe. The seas will be completely full of refuses in a few years, if pollution continues at the same speed.

In a first step, the plastic waste is collected by specially designed equipment on the seas, sorted and shredded. Separation and recycling of the waste is carried out on land. In a second step, the collected plastic debris will be reconverted into oil, directly on board of oil tankers. One ton of plastic allows to recover about 900 liters of oil.

ONE EARTH – ONE OCEAN e.V. participates as the only international NGO in cleanup operations of the Nigerian Government in the Niger Delta.





PRODUCTS

PLASTIC BUCKETS
PAPER BAGS
NET BOOMS
FLEECE BOOMS
MATS, FLEECE CLOTH
DUCT COVERS
LEAKAGE SETS
NET BLOCKS AND NET BAGS
OIL SPILL RECOVERY TRAILER



PLASTIC BUCKETS

- · Perfect to dose DEUREX PURE
- \cdot The loose material agglutinates upon contact with oils and chemicals
- · This makes skimming of the adsorbed material very easy
- · Usable as storage container
- \cdot Usable to contain and to dispose the adsorbed material

SMALL BUCKETS

29 cm x 25 cm x 25 cm = 1 kg DEUREX PURE 60 items per pallet

LARGE BUCKETS

40 cm x 40 cm x 37 cm = 3 kg DEUREX PURE 24 items per pallet

PAPER BAGS



 One bag of DEUREX PURE weighs only 5 kg, one bag filled with granules weighs 20 kg or more
 Bag dimensions according to commercial adsorbents

- · Higher adsorption ratio with less material
- · The loose material agglutinates upon contact with oils and chemicals
- \cdot This makes skimming of the adsorbed material very easy

PAPER BAGS

80 cm x 40 cm x 20 cm = 5 kg DEUREX PURE 21 bags per pallet, single carton 18 bags per pallet, shipping carton





NET BOOMS

- \cdot DEUREX PURE covered by a stable net
- · Fastest adsorption due to direct contact with DEUREX PURE
- Carabiner allow easy linking to barriers (2 pieces on 300 cm booms, 4 pieces on 600 cm booms)
- · Integrated rope increases durability
- · Booms float durably even when saturated

120 cm x 8 cm

16 items per carton / 8 cartons per pallet

300 cm x 8 cm 10 items per carton / 8 cartons per pallet

600 cm x 8 cm 5 items per carton / 8 cartons per pallet

120 cm x 10 cm 10 items per carton / 8 cartons per pallet

300 cm x 10 cm 4 items per carton / 8 cartons per pallet

600 cm x 10 cm 2 items per carton / 8 cartons per pallet

120 cm x 15 cm 30 items per carton / 2 cartons per pallet

FLEECE BOOMS

- · The packaging to dam up
- · Developed for water applications
- DEUREX PURE in this packaging unites the benefits of our adsorbent with those of a barrier and those of an adsorbent fleece
- The cover is an extremely robust and adsorbent fleece
 Carabiner allow easy linking to barriers
 Booms float durably even when saturated

300 cm x 15 cm

25 items per carton / 2 cartons per pallet

MATS AND FLEECE CLOTH

- · The packaging against leakages and for preventative purposes
- · DEUREX PURE covered by a thin fleece
- · Very fast adsorption and distribution due to greater surface area

MATS

50 cm x 80 cm 50 items per carton

FLEECE CLOTH

50 cm x 40 cm

100 items per carton

FLEECE ROLLS

50 cm x 25 m







DUCT COVERS

- \cdot Protection of water intakes against liquid pollutions
- · Available in round and square shape
- \cdot Cover is made of robust fleece material
- \cdot Bails allow easy handling

DUCT COVERS ROUND

60 cm diameter

4 items per carton

DUCT COVERS SQUARE

50 cm x 50 cm 4 items per carton



LEAKAGE SETS



- · Protection against hazardous materials
- · Fast and efficient adsorption
- · Great surface area
- · Big carry handles allow easy handling
- · Cover is made of robust fleece material
- · Including gloves and bin bag

LEAKAGE SETS

70 cm x 50 cm 25 items per carton / 4 cartons per pallet



NET BLOCK AND NET BAG



· Mesh allows direct contact with DEUREX PURE · Extremely fast adsorption · Stable carry handles ease the handling

NET BLOCK

 $50 \text{ cm} \times 50 \text{ cm} \times 20 \text{ cm} = 5 \text{ kg} \text{ DEUREX PURE}$ 30 items per carton / 2 cartons per pallet

NET BAG

 $30 \text{ cm} \times 60 \text{ cm} = 4 \text{ kg} \text{ DEUREX PURE}$ 25 items per carton / 2 cartons per pallet



OIL SPILL RECOVERY TRAILER



Mobile solution of PURE products
Reduces response time when oil spills occure
Complete PURE assortment is immediately available

Loose material in paper bags and plastic buckets
Mats and fleece cloths
Booms
Leakage kits

Extensive equipment for immediate use

· Individual configuration possible





DEUREX PURE The oil and chemical adsorbent.



MATS AND DUCT COVERS

The packaging against leakages and for preventative purposes.







LEAKAGE SETS The product to protect against hazardous materials.



PAPER BAGS For everyone who needs great amounts of the loose product.



NET BLOCKS AND NET BAGS The stable packaging for all water applications.



NET BOOMS DEUREX PURE covered by an extremely stable net.



FLEECE BOOMS The 3in1-product to dam up.

SAFETY DATA

Further information on all mentioned products can be found in the Material Safety Data Sheets. All current toxicological and ecological values and properties are listed in the MSDS.

The MSDS provide information on hazard class designations, safety measures, exact handling and storing as well as information on disposal regulations.

PLEASE NOTE

All data are based on our current knowledge and inform about our products and their applications. There is no assurance for certain properties and their suitability for certain applications. The customer is responsible to care for the necessary safety measures and to ensure the appropriate handling of the product. Existing industrial property rights have to be considered.

An unobjectionable quality is assured within the scope of our general terms and conditions.

DEUREX_PURE_ENG_2016_05



DEUREX[®] THE WAX COMPANY

DEUREX AG

Dr.-Bergius-Straße 8-12 D-06729 Elsteraue T +49 (0) 34 41 - 8 29 29 21 F +49 (0) 34 41 - 8 29 29 28

www.deurex.com info@deurex.com