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## CHARACTERISTICS OF FLOATING SORBENT TO BE USED AT SEA AND IN INLAND WATERS ACCORDING TO AFNOR NFT 90-360

### SORBENT TYPE A - BULK SORBENT

The table below gives a non-exhaustive list of sorbent products tested by *Cedre*'s laboratory measured using crude Arabian Light, topped at 110°C (viscosity 42-45 cP at 20°C) for their efficiency and specifies:

- ➡ the sorbent capacity which allows a comparison of the products performances.
- ➡ the nature of the sorbent material, which is an essential element to define the storage conditions and the disposal of the product (eg: incineration).

Only products which meet to the following criteria are listed below:

1. sorbent capacity: sorbent capacity in weight higher than 5  
or  
sorbent capacity in volume higher than 0,5 (calculated according to the apparent density of the product)
2. hydrophobia: retention capacity of water/retention capacity of oil equal or below 0,25
3. stability: the product must stay stable and un-friable for keep its properties

NAME OF THE PRODUCT	NATURE OF THE MATERIAL	ASPECT	ABSORBENT CAPACITY BY WEIGHT	SUPPLIER
<b>CORKSORB G01006</b>	vegetal (cork)	dark brown granules	8,3	AMORIM ISOLAMENTOS S.A.
<b>CORKSORB G02025</b>	vegetal (cork)	light brown granules	3,0	AMORIM ISOLAMENTOS S.A.
<b>DIPSORB T</b>	polyurethane	granulate	19,0	SAITEC SA
<b>ELCOSORB</b>	vegetal fiber (peat)	brown fiber	7,8	DIPTER
<b>ERGON</b>	polypropylene	white « spaghetti »	10,6	ERGON
<b>MICROSORB</b>	polypropylene	white flake	13,7	SCHOELLER Industries S.A.S
<b>REPSORB SPAGHETTI</b>	polypropylene	white fiber	9,0	REP
<b>VERDYOL SORBENT</b>	vegetal fiber	cream-coloured fiber	12,5	VERDYOL INTERNATIONAL

### NOTE ABOUT THE USE OF DATA OF TABLE

The sorbent capacity in weight in the table, is the retention capacity when the sorbent is saturated, with oil (crude Arabian Light, topped at 110° C). For each product, it is possible to determine the theoretical price per treated liter, by combining the retention capacity in weight (sorbent capacity) with the price of the sorbent.

The price per treated liter of oil is a good criterion to compare the efficiency of various sorbents from an economic point of view.

Beyond this criterion, for obvious operational reasons, it is important to evaluate the sorbent capacity in volume, which is the volume of sorbent needed to recover a given volume of pollutant. This can be calculated by taking into account the apparent density of the product in its packaging, available from the supplier, and the sorbent capacity in weight.

note: some manufacturers might modify the composition or the nature of the sorbent they market; in case of doubt, do not hesitate to consult *Cedre* which keeps a sample of each product that is tested ; this will allow, at least, a visual comparison to be made.

Additionally it is always possible to order a control test of the product.

This procedure of approval is carried out without prejudice to the procedures prescribed under the French law n°77-771 of 12 July 1977, as amended by French Law n°82-905 of 21 October 1982 relating to the control of chemicals and its implementary provision.

If the data provided by *Cedre*, valid for a three year period, is not updated by the manufacturer or retailer, *Cedre* cannot guarantee that the product is still available for purchase or that it still presents the same characteristics as the sample tested.

## CHARACTERISTICS OF FLOATING SORBENT TO BE USED AT SEA AND IN INLAND WATERS ACCORDING TO AFNOR NFT 90-360

### TYPES B & C - SHEETS, ROLLS or MAT

The table below gives a non-exhaustive list of sorbent products tested by *Cedre's* laboratory) measured using crude Arabian Light, topped at 110°C (viscosity 42-45 cP at 20°C) for their efficiency and specifies:

- ➡ the sorbent capacity which allows a comparison of the products performances.
- ➡ the nature of the sorbent material, which is an essential element to define the storage conditions and the disposal of the product (eg: incineration).

Only products which meet to the following criteria are listed below:

1. sorbent capacity: sorbent capacity in weight higher than 5
2. hydrophobia: retention capacity of water/retention capacity of oil equal or below 0,25
3. stability: the product must be sufficiently strong to be manipulated as it is without tearing

NAME OF THE PRODUCT	NATURE OF THE MATERIAL	ASPECT	ABSORBENT CAPACITY BY WEIGHT	SUPPLIER
<b>AQUASORB 100</b>	polypropylene	white	14,0	REICO
<b>AQUASORB 200</b>	polypropylene	white	14,5	REICO
<b>DIPTER 2011</b>	polypropylene	white roll	11,9	DIPTER S.A.S.
<b>ENV200-M</b>	polypropylene	white sheet	12,9	SPC International
<b>ERGON</b>	polypropylene	white	11,6	ERGON
<b>HY4050X L</b>	polypropylene	white	16,7	EUROSORB
<b>OP100-E</b>	Polypropylene	white sheet	13,0	SPC International
<b>POROIL</b>	polyester polypropylene	brown	8,7	ENAC
<b>POWERSORB HP 156</b>	polypropylene	white	16,5	3M
<b>POWERSORB T 156</b>	polypropylene	white	13,9	3M
<b>REPSORB FEUILLE (sheet)</b>	polypropylene	white sheet	12,6	REP
<b>SH 150</b>	polypropylene	white roll	11,9	SCHOELLER Industries S.A.S
<b>SH 250</b>	polypropylene	white roll	13,5	SCHOELLER Industries S.A.S
<b>VF240</b>	polypropylene	pale green	14,6	HALECO
<b>VF240W</b>	polypropylene	pale green	11,2	HALECO

### NOTE ABOUT THE USE OF DATA OF TABLE

The sorbent ability in weight in the table, is the retention capacity when the sorbent has reached on point, measured using crude Arabian Light, topped at 110° C. For each product:

It is possible to determine the theoretical price per treated liter, by combining the retention capacity in weight (sorbent ability) with the price of the sorbent.

The price per treated liter of oil is the only criterion by which the efficiency of the various sorbents can be compared from an economic point of view.

Some manufacturers may modify the composition or the nature of the sorbent they market; in case of doubt, do not hesitate to consult *Cedre* which keeps a sample of each product that is tested; this will allow, at least, a visual comparison to be made.

Additionally it is always possible to request a product test from *Cedre*.

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## CHARACTERISTICS OF FLOATING SORBENT TO BE USED AT SEA AND IN INLAND WATERS ACCORDING TO AFNOR NFT 90-360

### TYPES D & E - PILLOWS or SOCKS and BOOMS And TYPES G – SPECIAL PRODUCTS

The table below gives a non-exhaustive list of sorbent products tested by Cedre's laboratory) measured using crude Arabian Light, topped at 110°C (viscosity 42-45 cP at 20°C) for their efficiency and specifies:

- ➡ the sorbent capacity which allows a comparison of the products performances.
- ➡ the nature of the sorbent material, which is an essential element to define the storage conditions and the disposal of the product (eg: incineration).

Only products which meet to the following criteria are listed below:

1. sorbent capacity: sorbent capacity in weight higher than 10
2. hydrophobia: retention capacity of water/retention capacity of oil equal or below 0,25
3. stability: the product must stay stable and un-friable for keep its properties

NAME OF THE PRODUCT	NATURE OF THE MATERIAL	ASPECT	ABSORBENT CAPACITY BY WEIGHT	SUPPLIER
<b>TYPES D &amp; E - PILLOWS or SOCKS and BOOMS</b>				
<b>AQUASORB</b>	polypropylene	white	23,0	REICO
<b>DIPTER 2030 (boom)</b>	polypropylene	white	23,0	DIPTER S.A.S.
<b>HY810</b>	polypropylene	white	21,1	EUROSORB
<b>MICROSORB (boom)</b>	polypropylene	white	23,0	SCHOELLER Industries S.A.S
<b>TYPE G - SPECIAL PRODUCT</b>				
<b>BLOCKS – RIGID PLATE</b>				

### NOTE ABOUT THE USE OF DATA OF TABLE

The sorbent ability in weight in the table, is the retention capacity when the sorbent has reached on point, measured using crude Arabian Light, topped at 110° C. For each product:

It is possible to determine the theoretical price per treated liter, by combining the retention capacity in weight (sorbent ability) with the price of the sorbent.

The price per treated liter of oil is the only criterion by which the efficiency of the various sorbents can be compared from an economic point of view.

In the case of a boom, the results of tests apply to the constituent material of the boom and not to the boom itself; the performances of booms may vary slightly according to the state of compression of the material within the boom.

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If the data provided by Cedre, valid for a three year period, is not updated by the manufacturer or retailer, Cedre cannot guarantee that the product is still available for purchase or that it still presents the same characteristics as the sample tested.

Some manufacturers may modify the composition or the nature of the sorbent they market; in case of doubt, do not hesitate to consult *Cedre* which keeps a sample of each product that is tested; this will allow, at least, a visual comparison to be made. Additionally it is always possible to request a product test from *Cedre*.

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