



TERRAECOLOGY®

Catalogue 2012

Products and solutions
for spill response
in the industry



on the market
since
2007



company's clients—
major oil,
gas and industrial
holdings

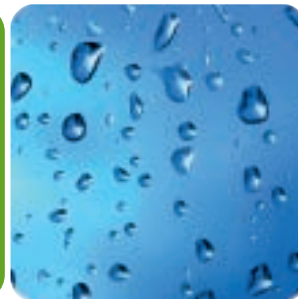
extensive
experience
of **FEA**



exclusive
representative
of leading world
products brands
of ecology sector



availability
of **own**
production



cooperation with
leading laboratories
and research
institutes
in the country



TERRAECOLOGY®

we make the planet green

Content



Sorbents



Absorptive means



Spill kits



Mercury handling



Support equipment



Machinery

Sorbents

Absorbent «Spill-Sorb»®

4

Sorbent «PROFSORB»®

6

Absorptive fabrics

For petroleum, oil / oil products and gasoline TE-BOS

8

For aggressive chemical agents TE-HOS

14

Universal sorptive fabrics TE-MOS

16

Universal wiping cloths TE-WIP

16

Spill kits

Oil spill kits (LARN)

17

Chemical spill kits (LARHV®)

19

Universal spill kits (Industrial kit)

21

Fabrics for mercury handling

Mercury spill kits DEMERKIT

23

Mercury neutralizers

23

Storage container for waste mercury-containing lamps

23

Support equipment

Absorbent blowgun

24

Squeezing machine

24

Machinery and equipment TRUXOR

The machine amphibious TRUXOR

25

Attachments

25

Oil clean-up equipment

27

Reed cutting

28

Rakes

29

Dredge pumps

30

Excavator

31

Grip bucket & log grab

32

Cultivator

33

Our Clients

34

Oil and chemical absorbent «Spill-Sorb®»

Absorbent «Spill-Sorb®» from sphagnum peat moss – all natural, organic, non-toxic, proven in laboratory and field conditions, an industrial sink and an agent for remediation and reclamation, which is very economical, efficient, and can not be leachable. Absorbent suppresses vapors and absorbs hydrocarbons on land and water, in wet and dry conditions.

Absorbent «Spill-Sorb®» – completely environmentally friendly solution for oil spill, petroleum products and organic chemicals. It has a natural ability to biodegrade absorbed hydrocarbons proved the leading Russian institutes that leave the used absorbent in the soil.



Advantages:

1. ability to biodegrade (biodegradation) of absorbed hydrocarbons;
2. opportunity to use at extremely cold temperature conditions;
3. the absence of desorption;
4. the possibility of use on land or water;
5. high degree of water treatment;
6. high speed and large amount of absorption;
7. flexibility (more than 85 substances absorbed);
8. non-abrasive sorbent;
9. isolation of volatile flammable vapors;
10. easy and convenient to transport and use;
11. does not require special training and equipment for use;
12. accumulated extensive experience with global;
13. reasonable price.



Oil-contaminated land (Nizhnevartovsk, Russia)

1. The oil content in soils is 28%
2. 2 days after application of the absorbent
3. 45 days after the sorbent oil content in soils was 5.8%, less than the Maximum Allowable Rate for Khanty-Mansiysk Autonomous Okrug (6%)

Name	Code	Dimensions	Weight	Absorbing capacity*
Absorbent «Spill-Sorb®»	4CF-200L	80 x 40 x 35 cm	25 kg	200 litres
Absorbent «Spill-Sorb®»	1.5CF-75L	55 x 35 x 22 cm	10 kg	40 litres

* oil



TERRAECOLOGY®

we make the planet green

List of absorbable substances:

Animal Fats	Styrene	Bromoform	Hexane	Pentane
Blood	Acetone	Canola Oil	Hexachlorobenzene	Pentachlorophenol
Bunker Fuel	Acetone cyanohydrin	Carbon Disulphide	Hexachlorobutadiene	Phenol
Crude Oils	Acrolein	Carbon Tetrachloride	Hexachloroethane	Phenol 48% Acetone
Cutting Oils	Alcohols	Chloroform	Hexane 97%	Petroleum Ether
Cyanide Wash	Allylchloride	Chloromethane	Isobutanol	Propanol
Diesel Fuels	Acetonitrile	Chlorobenzene	Isoprene	Scintillation Liquid
Dyes	Amyl Acetate	Corn Oil	Isopropanol	Silicone Oil
Gasoline/Petrol	Avgas 100/130	Cyclohexane	JP/7	Tetrachlorethane
Heavy Metals	Benzene	Dichlorobenzene	Methanol	Tetrachlorethylene
Herbicides	Butanol	Dichloromethane	Methylene Chloride	Tetrahydrofuran
Inks (Oil based)	Butyl Acetate	1,2-Dichlorethane	Methyl Ethyl	Toluene
Jet Fuels	Butyric Acid	Ethanol	Keytone	Triethylamine
Kerosene /Paraffins	2-Butanone	Ethyl Benzene	Methylphenol	Trichlorethylene
Motor Oil	Bromodichloromethane	Ethyl Ether	Methyl Methacrylate	Trichlorophinol
Oil Based paints		Ethyl Glycol	Napthalene	Vinyl Acetate
PCBs		Heptane	2-Nitroaniline	Vinyl Chloride
Pesticides			Nitrobenzene	Xylenes

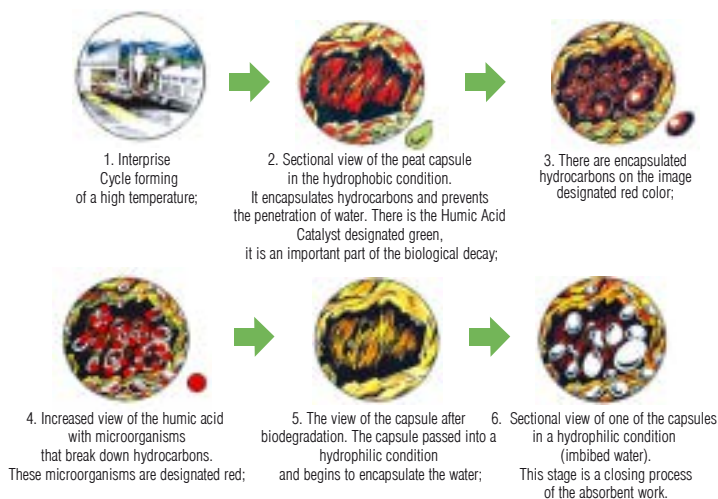
Submittal documents:

- user manual (instruction);
- certificate of conformity;
- Sanitary–Epidemiological Conclusion (SES);
- security passport (MSDS);
- conclusion of VNIPO Russian Ministry of Emergency

Situations;

- Rostekhnadzor permission;
- The conclusion of UNIDO on the possibility of biodegradation;
- conclusion of Gubkin Russian State University of Oil and Gas about the effect of the absorbent to clean up soil from oil pollution;
- conclusion of Russian State Agrarian University MTAA named after K.A.Timiryazev about environmental optimization, reclamation and remediation of contaminated soils by various petroleum products, chemicals, etc.

The process of absorption and biodegradation



Acid and alkali sorbent «PROFSORB»®



«PROFSORB»® sorbent based on the limestone – an environmentally friendly solution for liquids spill response (acids, bases, etc.).

Sorbent «PROFSORB»® is a granular yellow–gray color material, made from natural mineral; non–toxic, fire–and explosion–proof, is inert upon contact with the majority of liquid chemicals.

Appendix

Sorbent can absorb qualitatively and keep well liquids thanks to fine–pored structure. It is designed to eliminate spills and absorption of acids, caustics and other corrosive liquids.

«PROFSORB»® can be used in chemical plants, industrial enterprises of various industries, also refineries and transport companies etc, where corrosive liquids are used in the production process.

Attributes:

- High adsorption extent (comparing with quartz sand);
- High absorption rate;
- Universality (all aggressive liquids except hydrofluoric acid);
- Fire–and explosion–proof, non–toxic;
- Isolation of volatile flammable vapors;
- Its an environmentally friendly at saturation;
- Doesnt expand and doesnt lose mechanical reliability when using.



Technical characteristics of sorbent

Item	Unit	Value
Type	–	The granular yellow–gray color material
Structure	–	SiO ₂ – not more than 84%, Fe ₂ O ₃ – not more than 3,2%, Al ₂ O ₃ , MgO, CaO – not more than 8%
The absorption capacity:		
– sulfuric acid	% by weight	147
– hydrochloric acid	kg by the sorbent kg	94
– nitric acid		123
– ammonium hydroxide		92
– toluene		90
– benzene		92
– methyl alcohol		81
Bulk weight, not more than	kg/m ³	650
The size of the fractions	mm	From 0,1 up to 10,0
The effective pore diameter	angtrrom	40–1200
Surface area	m ² /gr	Up to 120
Water capacity	%	90–95
Void factor	%	70
Resistance to fire	%	1400
Coefficient of thermal conductivity	W(m ² xC)	0,1
Class of hazard	GOST 12.1.007–76	4
Guaranteed storage life	years	No limits

Packaging and storage

The sorbent is packed in polypropylene bags with polyethylene liner 10 kg.

Stored in sealed packaging, in closed areas. Humidity and temperature requirements are not regulated provided that shipping bag is holistic. Following just listed conditions Subject to these conditions the shelf life is unlimited.

Production documentation

This sorbent is certified and meets specifications.

Item	Code	Dimensions	Weight	Sorption capacity *
Sorbent «PROFSORB»®	PS–10	50 x 50 x 8 cm	10 kg	14,7 kg

*acid /caustic

Absorptive fabrics

Absorptive fabrics booms, mats, pillows, cloths, tissues and special kits made from a nonwoven polymeric material for disposal and containment of spills of oil, petroleum products, chemicals and corrosive liquids.

TE-BOS line of absorptive fabrics absorb various oil products, TE-HOS for chemicals and corrosive liquids, TE-MOS / TE-WIP universal absorption fabrics.

Absorptive fabrics are made from nonwoven cloth produced from molten polypropylene with Meltblown technology.



For petroleum, oil / oil products and gasoline TE-BOS

TE-BOS line of absorptive fabrics is dedicated to allocate and absorb oil / petroleum products from the surface of the ground and water. They do not sponge water and can float.

Advantages:

- high speed of sorption;
- the opportunity to work afloat (the ability to work on the principle of the filter);
- high sorption capacity;
- endurance;
- universality (absorb various petroleum products);
- possibility of material regeneration.



Tissue

Hydrophobic sorbing tissues are used to absorb oil / petroleum products on the surface of the ground and water, for wiping out superficies, clean parts, tools, equipment and arms.

Wipes can contain the spill by putting on the locations of the process effluent and dumping. Napkins can be placed under the sources of possible / constant spills, for example, under the leaked barrels, equipment, from which oil can drip etc.

They can be used for permanent / long-term collection in basins with stagnant water, such as tanks and wells. Also It can be used as a filter for water or air. It can be used in filtration systems or alone too.

Sorbent tissues are intended for widespread one-time oil gathering and for permanent and long-term skimming. The tissue is changed to the new after a full or partial absorption, thereby providing a permanent gathering and advanced treatment of spill area, keeping constant cleanness of the place.



Tissues on the barrels cover

Sorbing hydrophobic tissue on the 50-gallons barrels cover absorbs instantly oil / petroleum products from faucets and allows to keep production area clean.

Item	Code*	Dimensions	Weight	Pack factor	Sorption capacity (packing)**
Sorbing tissue	TE-BOS-LMT2002SX	40 x 50 x 0,25cm	0,04 kg	200 pcs	120 litres
Sorbing tissue	TE-BOS-LMT4002SX	40 x 50 x 0,5cm	0,08 kg	100 pcs	120 litres
Sorbing tissue	TE-BOS-DTP280	Ø55cm	0,07 kg	25 pcs	25 litres

* 2S-covering "spunbond" on both sides, D – double width (80 cm), X – the presence of perforation;

** oil

Cloth

Sorbing hydrophobic cloth is used to gather and allocate oil / petroleum products spills on earth and water, in drainages, sewerage and runoff water systems. The cloth allocates spills. It overlaps on the locations of the process effluent and dumping. The cloth can cover technical floors and industrial area in order to keep the production area clean.

Cloths can be placed under the sources of possible or permanent spills, for example, under the barrel that can be leaky or under equipment stream with the oil, and etc. They can be used in reservoirs for permanent / long-term skimming in nonmowing or flowing water of low intensity. Furthermore, It also serves as a filter for water or air, and can be used in filtration systems or by itself.

Sorbing cloth is intended for widespread one-time oil gathering and for permanent and long-term skimming. The cloth is changed to the new after a full or partial absorption, thereby providing a permanent gathering and advanced treatment of spill area, keeping constant cleanness of the place. The cloth can be divided into parts (tissues).



Item	Code*	Dimensions	Weight	Pack factor	Sorption capacity (packing)**
Sorbing cloth	TE-BOS-LMTR2002SD	80cm x 50m x 0,25cm	8 kg	1 pcs	120 litres
Sorbing cloth	TE-BOS-LMTR4002SDX	80cm x 50m x 0,5cm	16 kg	1 pcs	240 litres

* 2S-covering "spunbond" on both sides, D – double width (80 cm), X – the presence of perforation;

** oil

Sorbing cloth with polyethylene coating

Sorbing cloth with polyethylene coating is used to gather and allocate oil / petroleum products spills on earth and on the yard area.

Polyethylene coating of the sorbing cloth keeps in oil / petroleum products even with supersaturation, leaving time for detection and timely replacement with new material. It is possible to divide the cloth into parts. It is particularly useful using indoors.

Besides it is useful for coating a large territory, for instance, to cover a whole workplace.



Item	Code*	Dimensions	Weight	Pack factor	Sorp. capacity (packing)**
Sorbing cloth with polyethylene coating	TE-BOS-PMSR400D	80cm x 50m x 0,5cm	19,2 kg	1 pcs	240 litres

* 2S-covering "spunbond" on both sides, D – double width (80 cm), X – the presence of perforation;

** Oil

Pillows



Sorbing hydrophobic pillows are used for oil skimming and containment of petroleum products on earth and on the water, in drainages, sewerage and runoff water systems.

Pillows allocate spills, by overlapping on the locations of the process effluent and dumping. Pillows can be placed under the sources of possible or permanent spills, for example, under the barrel that can be leaky or under equipment stream with the oil, and etc.

They are intended for widespread one-time oil gathering and for permanent and long-term skimming.

The pillow is changed to the new after a full or partial absorption, thereby providing a permanent gathering and advanced treatment of spill area, keeping constant cleanness of the place.



Item	Code	Dimensions	Weight	Pack factor	Sorption capacity (packing)*
Sorbing pillow	TE-BOS-PIL4050	40 cm x 50 cm x 5 cm	0,5 kg	10 pcs	60 litres

*oil

Booms

Sorbing hydrophobic booms are used for oil skimming and containment of petroleum products on earth and on the water. Booms are located on the border of the spill and may further tighten together in a circle or a line with ties. Also, it is possible to line drain point and stormwater drainage with booms to limit oil access to them. They can be used for permanent / long-term skimming in nonmowing or flowing water of low intensity such as reservoirs and wells.



Booms with metal carabines, reinforced with a synthetic rope for gathering in reservoirs with flowing water, such as reservoirs, runoffs, stormwater drainages, impoundments, wells, lakes and rivers. Also It can be used as a filter for water, and It can be used in filtration systems or alone too. Sorbing hydrophobic booms are intended for widespread one-time oil gathering and for permanent and long-term skimming. The boom is changed to the new after a full or partial absorption, thereby providing a permanent gathering and advanced treatment of spill area, keeping constant cleanness of the place.

Sorbing immersible booms are intended for oil / petroleum products skimming in drains, stormwater drainages, canalizations and wells.

Immersible booms do not sink, and disposed in waterworks on the surface of the water. They can be used in reservoirs, water systems for permanent / long-term skimming in nonmowing or flowing water, such as reservoirs, runoffs, stormwater drainages, impoundments, wells, lakes and rivers. Furthermore sorbing immersible booms can be suitable for applying as a filter and can be in use in stormwater drainage and filtration system. Booms are intended for widespread one-time oil gathering and for permanent and long-term skimming.

It is changed to the new after a full or partial absorption, thereby providing a permanent gathering and advanced treatment of spill area.



Item	Code	Dimensions	Weight	Pack factor	Sorption capacity (packing)*
Sorbing boom	TE-BOS-SOC7636	Ø7,6 cm x 3,6 m	1,13 kg	6 pcs	85 litres
Sorbing boom with metal carabines	TE-BOS-BOM12730	Ø12,7 cm x 3 m	2,2 kg	4 pcs	108 litres
Sorbing boom with metal carabines	TE-BOS-BOM12760	Ø12,7 cm x 6 m	4,4 kg	2 pcs	108 litres
Immersible boom	TE-BOS-SKM20050	Ø20 cm x 50 cm	0,58 kg	10 pcs	88 litres

* oil

For aggressive chemical agents TE-HOS

TE-BOS line of absorptive fabrics is dedicated to allocate and relieve of the consequences of the chemical spill (acids, alkali etc.). These fabrics sponge water and can not float.

Advantages:

- high speed of sorption;
- high chemical resistance;
- quality wearing;
- high sorption capacity;
- universality (absorb various chemical products);
- possibility of material regeneration.



Tissues and cloths

Chemical sorbing tissues and cloths are used to relieve of the consequences of the chemical spills (as acids, alkali etc.).

Tissues and cloths can allocate spills, by overlapping on the locations of the process effluent and dumping. Tissues and cloths can be placed under the sources of possible or permanent spills, for example, under the barrel that can be leaky.

Sorbing tissues can be used for cleaning surfaces and equipment. Cloth is suitable for floor and yard area covering to maintain cleanliness of the production for constant place cleanness.

The cloth can be divided into parts (tissues).



Item	Code*	Dimensions	Weight	Pack factor	Sorption capacity (packing)**
Sorbing chemical tissue	TE-HOS-LMT4002S	40 cm x 50 cm x 0,5 cm	0,08 kg	100 pcs	120 litres
Sorbing chemical cloth	TE-HOS-LMTR4002SDX	80 cm x 50 m x 0,5 cm	16 kg	1 pcs	240 litres

* 2S – covering "spunbond" on both sides, D – double width (80 cm), X – the presence of perforation;

** acid, alkali

Pillows



Chemical sorbing pillows are used to relieve of the consequences of the chemical spills (as acids, alkali, etc.).

Pillows can allocate spills, by overlapping on the locations of the process effluent and dumping. These articles can be placed under the sources of possible or permanent spills, for example, under the barrel that can be leaky, etc.



Booms



Chemical sorbing booms are used to allocate the spill and relieve of the consequences of the chemical spills (as acids, alkali, etc.).

Booms are located on the border of the spill and may further tighten together in a circle or a line with ties.

Also, it is possible to line drain point and stormwater drainage with booms to limit access of danger liquids to them.



Item	Code	Dimensions	Weight	Pack factor	Sorption capacity (packing)*
Chemical sorbing pillow	TE-HOS-PIL4050	40 x 50 x 5 cm	0,5 kg	10 pcs	60 litres
Chemical sorbing boom	TE-HOS-SOC7636	Ø7,6 cm x 3,6 m	1,13 kg	6 pcs	85 litres

* acid, alkali

Universal absorptive fabrics TE-MOS

TE-MOS line of absorptive fabrics is dedicated to allocate and relieve of the consequences of the chemical spill (oil, petroleum products and aggressive chemical liquids). These fabrics sponge water and can not float.

Advantages:



- high speed of sorption;
- high chemical resistance;
- quality wearing;
- high sorption capacity;
- universality (absorb various chemical products and oil / petroleum products);
- possibility of material regeneration.

Tissues on the cover of the barrel

Sorbing universal tissue on the 50-gallons barrel's cover absorbs instantly various liquids from faucets and allows keeping production area clean. Therewith the tissue is changed easily, what doesn not bar from work.



Universal wiping cloths TE-WIP

TE-WIP line of universal wiping cloths is dedicated to clean surfaces, clean working tools, mechanisms, equipment and hands of oil, gasoline, petroleum and chemical liquids. Reeled fabrics are perforated. Cloths instantly absorb oil products and chemicals and allow keeping production area clean. Ideal substitute for conventional cloths and rags.



Advantages:

- high speed of sorption;
- high chemical resistance;
- do not have a nap and a high level of quality wearing;
- high sorption capacity;
- universality (absorb various chemical products and oil / petroleum products);
- opportunity of material regeneration and multiplexing.

Item	Code	Dimensions	Weight	Pack factor	Sorption capacity (packing)*
Sorbing universal tissue on the 50-gallons barrel's cover	TE-MOS-DTP280	Ø55cm	0,07kg	25 pcs	25 litres
Universal wiping cloth	TE-WIP02H90B	25cm x 30cm x 500sheets	3,4kg	1 pcs	50 litres

*кислота, щелочь

Spill Kits (oil, chemicals, universal)

Spill Kits are designed for emergency response and spill elimination of oil, petroleum products and chemicals.

Spill Kits are the most universal, compact and mobile means of responding.



LARN Spill Kits (for oil)

Spill Kits for oil – integrated solutions for spill response of oil and petroleum products on the ground and on the water.

Advantages:

- rapid spill response;
- a comprehensive solution for oil spills;
- the ability of the absorbent to biodegrade absorbed hydrocarbons / chemicals;
- the absence of absorbent desorption;
- isolation of volatile vapor by sorbent products;
- working on water and land;
- hydropathy of sorbent products (the ability to work on the filter principle);
- a wide range of absorbed substances (more than 80 substances);
- lightness and compactness, water tightness, frost-resistance and wear-resistance.

Spill Kit AUTO SK-32

A special kit of emergency response for spill elimination of oil and petroleum products during transportation (road transport / fuel truck). Kit is suitable for transportation in the cabins of vehicles.





TERRAECOLOGY®

we make the planet green

LARN Spill Kit for oil SK-120 (SK-240, SK-360, SK-660, SK-1100)

Spill Kit is used for rapid response at medium spills of oil and various petroleum products. Kit is close to places associated with the turnover of hydrocarbons and provides a comprehensive solution from spill containment to disposal.

This product can be successfully applied in industrial plants, gas stations, oil base, air and sea ports, sea and river vessels, on oil and petroleum products filler stations, in case of remote use of specialized equipment and machines, and other enterprises.

Size of Spill kit depends on the amount of absorbed petroleum / oil and other tasks. The kit can be on open platform, and additionally equipped with a lock.

Configuration:

Item	Значение					
	SK-32	SK-120	SK-240	SK-360	SK-660	SK-1100
Container, pcs	1*	1	1	1	1	1
Absorbent for solvent / hydrocarbon«Spill-Sorb®», kg	0,5	–	10	25	30	40
Sorbing boom, pcs	1	1	2	3	8	16
Sorbing pillow, pcs	1	3	4	6	15	30
Sorbing tissue, pcs	10	30	40	50	100	200
Scoop, pcs	1	–	1	1	1	1
Folging broom, pcs	1*	–	1	1	1	1
Bag for waste disposal , pcs	3	3	5	10	20	30
Fencing tape, pcs	–	–	–	1	1	1
Protective oil-resistant gloves, pair	1	1	1	2	3	3
Respirator, pcs	1	–	1	2	3	3
Scattering scoop, pcs	–	–	1	1	1	1
Wet wipes, pack	1	–	–	–	–	–
Sticker label «LARN kit», pcs	–	1	1	1	1	1
Sticker «Operational manual», pcs	–	1	1	1	1	1
Manual, pcs	1	1	1	1	1	1

* bag, * wisp

Item	Code	Dimensions	Weight	Sorption capacity (packing)*
LARN auto spill kit	SK-32	40 x 40 x 20 cm	3,5 kg	30 litres
LARN spill kit	SK-120	56 x 48 x 94 cm	15 kg	50 litres
LARN spill kit	SK-240	74 x 59 x 107 cm	32 kg	156 litres
LARN spill kit	SK-360	80 x 75 x 107 cm	57 kg	308 litres
LARN spill kit	SK-660	78 x 137 x 122 cm	95 kg	502 litres
LARN spill kit	SK-1100	108 x 137 x 136 cm	137 kg	844 litres

* oil



LARHV® spill kits (chemical)



Service LARHV® spill kits – combine solutions for chemical spill response on industrial project.

Advantages:

- fast response in case of spill;
- mobility of the spill;
- overall solution in case of spill (auxiliary products and remedies are available);
- universality (a large range of absorbed substances);
- lightness and compactness, water tightness, frost-resistance and wear-resistance.

LARHV® SKA-40 spill kit (laboratory)

LARHV SKA-40 kit is for emergency response in case of spill of chemical agents at the place of production and in the laboratory. Product assignment – the elimination of acid drain, caustic drain, also wastage of mercury, organic chemicals, chemical liquids, oil and petroleum products. The kit includes containment tools, elimination tools, gathering tools, means for disposal of chemicals and containers for storage and transport.

Configuration:

Item	Value
Container, pcs	1
Acid blocker (2,4 kg-tank), pcs	1
Caustic blocker (2,4 kg-tank), pcs	1
Chemical mercury demercurizer (two 0,6kg-tanks), pcs	1
Acid and caustic sorbent PROFSORB (one 1,4 kg-tank), pcs	1
Absorbent for solvent and hydrocarbon Spill-Sorb, kg *	1
Wisp, pcs	1
Filiform brush, pcs	1
Cooper brush, pcs	2
Chemical impervious gloves, pairs	3
Acid-base balance respirator, pcs	1
Chemical safety goggles, pcs	1
Scoop, pcs	1
Bag for waste disposal, pcs	10
Wet wipes, pcs	2
Universal indicator paper, pack	1
Sticker label «LARHV kit», pcs	1
Manual, pcs	1



Item	Code	Dimensions	Weight	Sorp. capacity*
LARHV kit	SKA-30	40 x 30 x 34 cm	10 kg	2 kg ¹ , 1,9 kg ²

¹oil, ²acid/alkali



TERRAECOLOGY®

we make the planet green

LARHV® SKA-120 (SKA-240, SKA-360, SKA-660, SKA-1100) spill kit

Product assignment – chemical agents spill response, the elimination of caustic drain, organic chemicals and chemical liquids on an industrial scale.

The kit includes containment tools, elimination tools, gathering tools, means for disposal of chemicals and containers for storage and transport.

The kit should be in use at the place of production, storage, transportation and frequent use of chemically hazardous liquids.

The kit can be on open platform, and additionally equipped with a lock.



Configuration:

Item	Value				
	SKA-120	SKA-240	SKA-360	SKA-660	SKA-1100
Container, pcs	1	1	1	1	1
Acid and caustic sorbent «PROFSORB®», kg	10	20	30	50	70
Sorbing boom, pcs	1	2	3	8	16
Sorbing pillow, pcs	2	4	6	15	30
Sorbing tissue, pcs	10	20	50	100	150
Folging broom, pcs	–	1	1	1	1
Shovel-scoop, pcs	–	1	1	1	1
Bag for waste disposal , pcs	3	5	10	20	30
Fencing tape, pcs	–	–	1	1	1
Universal indicator paper , pack	1	1	1	1	1
Wet wipes, pcs	1	1	2	2	3
Chemical impervious gloves, pairs	1	1	2	3	3
Acid-base balance respirator, pcs	1	1	1	2	3
Chemical safety goggles, pcs	1	1	1	2	3
Sticker label «LARHV kit», pcs	1	1	1	1	1
Manual, pcs	1	1	1	1	1

Item	Code	Dimensions	Weight	Sorption capacity*
LARHV spill kit	SKA-120	56 x 48 x 94 cm	24 kg	48 litres
LARHV spill kit	SKA-240	74 x 59 x 107cm	43 kg	96 litres
LARHV spill kit	SKA-360	80 x 75 x 107cm	65 kg	168 litres
LARHV spill kit	SKA-660	78 x 137 x 122cm	120 kg	372 litres
LARHV spill kit	SKA-1100	108 x 137 x 136cm	172 kg	654 litres

*acid/caustic



Industrial spill kit (Universal)

Service Industrial spill kits a complex solution for emergency response in case of chemicals and petroleum products spill.

Industrial SKI-120 (SKI-240, SKI-360, SKI-660, SKI-1100) spill kit

Product assignment – the elimination of acid/caustic drain, organic chemicals and chemical liquids, oil and petroleum product at the place of production, and liquidation these liquids.

The kit includes containment tools, elimination tools, gathering tools, means for disposal of chemicals and containers for storage and transport.



Basic attributes are:

- fast response if acid/caustic, organic chemicals and chemical liquids, oil and petroleum spill;
- comfortable portability;
- a complex solution in case of oil spills (auxiliary products and remedies are available);
- universality (a large range of absorbed substances).



Configuration:

Item	Value				
	SKI-120	SKI-240	SKI-360	SKI-660	SKI-1100
Container, pcs	1	1	1	1	1
Absorbent for solvent and hydrocarbon «Spill-Sorb», kg	–	–	10	20	30
Acid and caustic sorbent «PROFSORB», kg	–	10	10	30	50
Sorbing boom, pcs	1	1	2	4	8
Sorbing pillow, pcs	1	2	4	6	10
Sorbing tissue, pcs	10	20	30	50	100
Sorbing chemical boom, pcs	1	1	2	4	8
Sorbing chemical pillow, pcs	1	2	4	6	10
Sorbing chemical tissue, pcs	10	20	30	50	70
Folging broom, pcs	–	1	1	1	1
Shovel-scoop, pcs	–	1	1	1	1
Bag for waste disposal , pcs	3	5	10	20	30
Scattering scoop, pcs	–	–	1	1	1
Fencing tape, pcs	–	–	1	1	1
Universal indicator paper , pack	1	1	1	1	1
Wet wipes, pcs	1	1	2	2	3
Protective oil-resistant gloves, pair	1	1	1	2	2
Chemical impervious gloves, pairs	1	1	1	2	2
Acid-base balance respirator, pcs	1	1	1	2	3
Chemical safety goggles, pcs	1	1	1	2	3
Sticker label «Industrial kit», pcs	1	1	1	1	1
Manual, pcs	1	1	1	1	1

Item	Code	Dimensions	Weight	Sorption capacity*
Industrial kit	SKI-120	56 x 48 x 94cm	16 kg	26 litres ¹ , 32 litres ²
Industrial kit	SKI-240	74 x 59 x 107cm	34 kg	38 litres ¹ , 60 litres ²
Industrial kit	SKI-360	80 x 75 x 107cm	57 kg	150 litres ¹ , 98 litres ²
Industrial kit	SKI-660	78 x 137 x 122cm	117 kg	282 litres ¹ , 182 litres ²
Industrial kit	SKI-1100	108 x 137 x 136cm	175 kg	472 litres ¹ , 306 litres ²

¹oil, ²acid/caustic



Fabrics for handling mercury

DEMERKIT mercury spill kits

Kits for mercury neutralization are the most lightweight, compact, convenient, easy and mobile way to respond quickly: to allocate, neutralize vapors and mercury spills of mercury and mercury vapor because of mercury-containing lamps break.

The set is designed for emergency vapor / spill skimming in the production and storage areas, laboratories and public institutions (hospitals, universities, schools, nurseries).

It represents instruments for neutralization, liquidation, gathering, mercury vapour and spillage utilization, skin and respiratory protection. Besides it comprises a container for storage and transportation.



Mercury neutralizers



Chemical mercury neutralizers are wired for mercury drops and vapour neutralizing.

Household mercury neutralizer is used to render harmless medical thermometers, barometers, mercury batteries, light bulbs, luminescence lamp. Neutralizer degrades mercury evaporation dramatically. This item is delivered in three containers of 100 ml each.

Industrial mercury neutralizer is used to neutralize the spill / vapours urgently. It is dedicated to indicate the hidden mercury contamination, to clean the surfaces of adsorbed mercury vapor. Due to the slow-release

property the article is effective in mercury shop floors in cases of prevention and during the current neutralization.

This item is delivered in two containers of 600g each.

Storage container for waste mercury-containing lamps

Specialized containers are designed for skimming, storage and transportation of spent mercury-containing lamps, bactericidal uviols, tanning lamp. Mercury-containing lamps should be stored in separate containers made of incombustible material to ensure the safety of lamps during storage. These containers provide ecological security in the enterprise, protection of the environment in general, as well as the legality of storing mercury-containing lamps.



Item	Code	Dimensions	Weight	Sorption capacity
Mercury spill kit DEMERKIT	SKM-20	20 x 15 x 10cm	1,5 kg	20 m ²
Mercury spill kit DEMERKIT	SKM-50	35 x 23 x 13cm	3 kg	50 m ²
Household mercury neutralizer	DR-1	–	0,3 litres	25 m ²
Industrial mercury neutralizer	DR-2	–	1,2 kg	20 m ²
Storage container for waste mercury-containing lamps	KRL-120/45	Ø120 x 45cm	8 kg	–
Storage container for waste mercury-containing lamps	KRL-60/45	Ø60 x 45cm	5 kg	–
Storage container for waste mercury-containing lamps	KRL-60/30	Ø60 x 30cm	4 kg	–

Support equipment

Absorbent blowgun

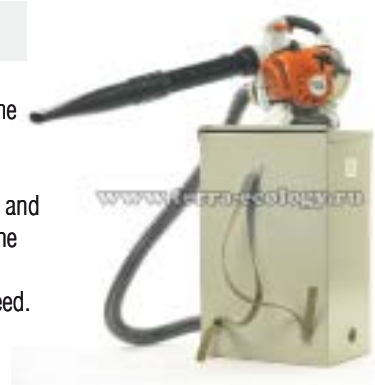


Absorbent blowgun designed for applying absorbent on the surface of the earth and water. Blowgun consists of a tank made of aluminum, and comprises also device for carrying on the operators back, and blower with a clutch sleeve. The sorbent is sucked from the tank through the clutch sleeve and dispersed on the contaminated surface. Production is settled by engine speed.

Specifications:

1. nominal content – 0,08 m³;
2. operating capacity – 0,06 m³;
3. cultivated area by the 1st charging – 30 m² (film thickness 2 mm);
4. production – up to 4 m³/h;

5. drive type – gasoline engine;
6. fuel – gasoline 92 octane (gasoline 93 octane)
7. dimensions – 46 x 35 x 70 cm;
8. weight – 12 kg.



Squeezing machine

Squeezing machine is a special mechanical product intended for recovery (extraction) of absorptive fabrics for the purpose of multiplexing. The application of this device allows the utilization of absorptive fabrics up to 10 times.

The equipment principle of operation is based on appliance of two rotating wringer rolls covered with oilproof rubber, and mounted on the frame.

Devise structure makes regulation of squeezing charge possible. It makes it by means of changing split between wringer rolls.

The device allows to wring 8cm–sorbent products effectively.

Specifications:

1. Height – 0,9 m;
2. Width – 0,9 m;
3. Wringer roll length – 0,6 m;
4. Wringer roll diameter – 6,5 cm;
5. Maximum split between wringer rolls – up to 2,5 cm;
6. Drain connection diameter – 3,5 cm;
7. Weight – 21,4 kg.

Item	Code	Weight	Dimensions
Absorbent blowgun	RS-1	12 kg	46 x 35 x 70 cm
Squeezing machine	OMU-1	21,4 kg	Operating height 0,9 m; working width 0,9 m



Machinery and equipment TRUXOR / amphibian vehicle "TRUXOR DM 5000"

Multi-purpose amphibian vehicle "TRUXOR" is for remediation of oil contaminated soil and water, for desilting, for cutting plants, dredging/improvement works, processing, etc.

The multifunctional amphibian Truxor has unique properties; this vehicle is used worldwide since 1996 both as an ashore and an afloat remediation vehicle. The machine is a first-of-its-kind on the market.

As an amphibian vehicle, it has advantages in working at the borderline between flood and field and at the same time cleaning from oil and petroleum products. It is a technique to clean defined water zones.

Low ground pressure allows to avoid the surface deterioration, that's why it's possible to use Truxor on wetlands, in special protection National territory and on the area that are prone to damage – that is, in sites, where operation of the conventional technique is difficult. The car handles well, turns easily about its axis in water and has the quality of balance: keeps accuracy when passes obstacles.

Model "Truxor DM 5000" is the latest development, based on a 15-year experience in this field. This model combines the up-to-the minute technology and easy of use



Item	Code	Dimensions	Weight	Technical data
Amphibian vehicle TRUXOR DM 5000	94-5000	4,7x2,06x2,1 m	1380 kg	Look through the catalog

Technical data «TRUXOR DM 5000»

Item	Characteristic
Engine	Diesel engine Kubota D1305, 29 h.p.
Electrical system	12 V, 40 ampere generator, 45 ampere / hour battery
Cooling system	Combined radiator for the engine and hydraulic system
Driving(left control handle)	To control the machine: 1 Hydraulic outlet– 140 bar working pressure, an adjustable effective output 0–25 l/min 2 hydraulic output terminals – 130 bar power pressure, effective output 11 l/min
Driving (right control handle)	Lifting movement, Leaning, The weight distribution 3 Hydraulic outlet– 150 bar working pressure, an adjustable effective output 0–50 l/min
Zone of the operator	The removable roof, ergonomic, adjustable heated seat; adjustable control unit; Control panel with warning lights and display of rotating speed indication, indication of engine temperature, hydraulic oil temperature and pressure in the hydraulic system, fuel level
Pace	0–100 m/min
Front lift	Load capacity 250 kg, the system of high–speed fixation of attached implements
Material	The pontoons are made of aluminum with a salt water–protective coating. Steel structures are galvanized
Dimensions	Length 4.7 m, width 2.06 m, height 2.1 m
Weight	1380 kg
Equipment	Working lighting, service equipment

The use of a powerful, high–grade hydraulic system allows to apply a wide range of attachments, including pumping equipment, excavating equipment (mounting), and components for spilled oil skimming, and many other things. The system of high–speed fixation allows to change attachments easily and quickly.

Attachments:

- a device for gathering oil (skimmer);
- excavating mounting;
- pumps for desilting;
- bucket and capture device;
- auger–drill dredger;
- equipment for mowing (reed harvester components);
- different rakes;
- cultivators, etc.

Attachments / Skimmer



Skimmer Doroskimmer 800 represents equipment for gathering emergency oil / petroleum product spill in defined water zones.

The skimmer kit comprises: brush device with an acceptance tray, gripping down spout – booms, oil–pump, storage tank, suction and pumping hoses, tubes, attachments of fittings.

Before the beginning of the work, an oil spot on the surface of the water is contained in the area of brush device rotation with a help of gripping booms.

Then, the skimmer accumulates oil/petroleum products in the accumulator tank with 200 l capacity, positioned between pontoons of the vehicle. This process is associated with a bristle roll work.

First, the bristle roll rotates, engages oil particles; and then, these particles are coned up in the accumulator tank due to operation of the skimmer comb. It cleans oil particles away from the bristle roll.

In addition to cleaning defined waters zones skimmer Doroskimmer 800 can also be used to gather oil from the ground.

Skimmer Doroskimmer 800 is equipped with pump that serves to swap oil from the acceptance tray in the accumulator tank.

Sala rollpump is a peristaltic pump that creates a powerful vacuum and provides vigorous suction.

Item	Code	Weight	Technical data
Skimmer Doroskimmer 800	79–5000	221 kg	Productivity: 0–20 m ³ /h
Pump Sala rollpump			Productivity: 12 m ³ /h under a pressure of 6 bar Effective pressure: 6 bar. Max pressure: 9 bar Technical vacuum: –0.95 bar

Reed cutter



Dorocutter 3090/3091 is recommended for regular mowing. It is obviously a necessary choice for most reservoirs. Mower is easily attached to the platform and it is connected to a hydraulic system of the machine. Replacement knives, their working width varies from 2.2 to 4 meters. The use ashore is prohibited, as it needs water for cooling during the operating process. Stone-protection system prevents knife damage while in contact with solid obstacles.



Dorocutter ESM 2100 is a front mower with dual-action knives Busati. These knives do not need water for cooling that allows to use the mower in shallow waters and wetlands. Reed cutter Dorocutter ESM 2100 has effective productivity and can also be used for cutting hard cane.



Dorocutter ESM 2200 cuts and gathers skewed cane that makes it as an indispensable aid in waterhole tendance, where water gets muddy quickly and cane harvesting is hampered. The possibility of simultaneous cutting and cane harvesting simplifies the process significantly.

If there is no need in cane harvesting, it is possible to remove the collecting grid of the scoop.



Dorocutter ESM 1700 is installed at the side of the Truxor platform. Ability to adjust the operating angle of the cutter allows the vegetation mowing along the banks. Busati knives do not need water for cooling that allows to use a scythe not only in water. Dorocutter ESM 1700 is fitted out with stone-protection system that prevents knife damage while in contact with solid obstacles. Scythe has good productivity and can easily cope with hard reeds and other vegetation.

Item	Code	Weight	Technical data
Dorocutter 3090	95-3090T	61 kg	4.0 m working width; 1.0 m depth of cutting
Dorocutter 3091	95-3091T	67 kg	4.0 m working width; 1.4 m depth of cutting
Supplementary knives kit for Dorocutter 3090/3091	95-70022	–	2.2 m working width
	95-70030	–	3.0 m working width
	95-70040	–	4.0 m working width
Dorocutter ESM 2100	90-ESM2100	68 kg	2.1 m working width; 0.5 m depth of cutting
Dorocutter ESM 2200	90-ESM2200	109 kg	2.1 m working width; 2.25 m width; 0.8 m depth of cutting
Dorocutter ESM 1700	90-ESM1700	75 kg	1.7 m working width; 0.5 m depth of cutting

Rakes

A plants gathering is not least problem than mowing. Beveled plants left in the water are mineral fertilizer. Therefore, it is advised to gather mowed plants and removed them out of the pond in order to avoid excessive pond salinity. Those who use the equipment for the care of the various basins should clean equipment before use in the new basin to prevent purposely the unwanted plants transfer from one aquifer system to another.

Rake – collector with hinged side-members serves for gathering and shipping of plants after mowing. Rakes can be equipped with a grid for dirt gathering, for algae harvest and for absorption (by petroleum product refining).

High-tipping sieve has a greater height that allows plants transshipping into trailer or on a barge. The sieve is made of perforated sheets that promotes better gathering of smaller particles as debris, algae and absorbents in contrast to the rake. In other words, it also serves to remove petroleum products.

Rake – comb. Spring-loaded plugs allow to drag skewed vegetation out of the water in areas with a rough shoreline, so that to gather this vegetation using the standard rake.



Item	Code	Weight	Technical data
Rake – collector	94-22500	60 kg	Working width: 2.0 or 3.5 m
Grid for rake-collector	94-29600	13 kg	Working width: 2.0 or 3.5 m
Sieve	94-47700	68 kg	Working width: 2.13 m Max. lift afloat: 1.3 m Max. lift ashore: 1.7 m
Rake – comb	94-47600	30 kg	Working width: 2.5 m

Pump hinge



The pump hinge Doropump is designed for silt absorbing, desilting and desludging from the bottom of reservoirs.

The pump is powered by a hydraulic drive and has a productivity up to 40 m³ / h. The pump is fasten to a telescopic holder (sold separately).

Rotating wheel with horizontal cutters/incisors and vertical teeth cultivates sludge deposits and cuts roots and soft plants toward to facilitate material feeding to the pump inlet.

Rotating wheel makes the pump more flexible than its predecessor, equipped with auger on inlet.

First, it's necessary to ensure sustained behavior of knives (that are built into a pump suction valve) for even material feeding. It is important to ensure even material feeding for the pump running either. Besides, pump Doropump can also be supplied with an auger instead of a drilling wheel.

Further components are complied complete with pump. And they are: drilling wheel with a hydraulic driving gear or auger, inlet bell, 3–meters–long armored hose, 25–meters–long of flat hose, 5 floats to the hose, a quick disconnect with clamps, 0.7–meters–long telescopic manipulator extension, 1 piece. The maximum recommended length of shipping hoses – 150 m.

Item	Code	Weight	Technical data
Pump Doropump	78–2501	87 kg	<p>Driving gear: hydraulic platform Truxor 5000.</p> <p>Productivity: up to 40 m³/h, depending on the material, lifting height and length of the hose. Max. working depth: 2.4 m, established with a telescopic manipulator (sold separately) and extension (included).</p> <p>Drilling Wheel diameter: 0.8 m</p>



Excavating mounting



In case of use of excavating mounting, excavator becomes floating vehicle with unique features. Excavating mounting can be used for cleaning lakes, for canal dredging/improvement works, drainage work, for dredging/improvement works around moorage, for cable laying etc.

Hinge control is carried out by two leverages of medium console from operator's position. Medium console can be adjusted at operator's wish.

Truxor allows to take measures in places where it's cannot use other types of equipment.



Item	Code	Weight	Technical data
Excavating mounting	77-1800	386 kg	Gorge radius: 3.1 m; Digging depth: 2.3 m; The reach range area of holder: 1.9 m. Control system with two levers to rotate, to lift soil and for digging. It's supplied with supports and the scoop at the capacity of 23 liters.
Scoop for excavating mounting	77-11900	–	Capacity – 49 liters, working widths – 0.6 m
Knife for root for excavating mounting	77-13400	–	Working depth – 0.6 m
Scoop-rake for excavating mounting	77-12000	–	Working depth – 0.9 m

Grab bucket for logs and Logging scissors



Grab bucket for logs and Logging scissors are used for uplifting sludge deposits and plants from the bottom of the reservoir. They are additionally equipped with a telescopic manipulator or with a mechanical holder.

Telescopic manipulator allows to achieve a working depth of 1.7 m. If the equipment is primarily used for the surface works and the coastline works, it is recommended to use a mechanical holder and bucket. In such a way a working depth reaches about 0.9 m. The mechanical holder has less weight than a telescopic manipulator does, what provides greater capacity.

Item	Code	Weight	Technical data
Grab bucket	94-58100	76 kg	Working depth: with telescopic manipulator – 1.7 m; with mechanical holder – 0.9 m.
Logging scissors	94-59500	40 kg	
Telescopic manipulator	94-58400	33 kg	
Mechanical holder	94-60600	9 kg	

Cultivator

Doromiller used for soft soil reclamation.
A cultivator execution with different working widths is possible.

A cutting drum of the cultivator is removable and can be disconnected. The power unit is mounted on the jib.

There is a need of a knife rotor with extension in the cases of cultivation of lilies roots and roots of other aquatic plants, in order to achieve a 1.6 m working depth of the device.



Item	Code	Weight	Technical data
Driving device	72-10000	36 kg	Turning number 0-300 rev/min. Max. torque of 400 Nm. Length 0.9 m
Milling tool	72-10200	33 kg	0.9 m milling tool
Milling tool	72-10300	23 kg	0.6 m milling tool
Milling tool	72-10400	16 kg	0.4 m milling tool
Knife rotor	72-10500	14 kg	0.8 m working width
Knife rotor extension	72-10100	16 kg	0.5 m long knife rotor extension



TERRAECOLOGY®

we make the planet green

Our clients:



РусГидро

Schlumberger



Forward
to safe the
planet!



115172, Moscow, POB 40

Tel: +7 (495) 972-83-22; +7 (495) 933-95-40

Fax: +7 (495) 933-95-40

E-mail: info@terra-ecology.ru

www.terra-ecology.ru