

### ERS 101 OIL SPILL CLEANER

#### Product Description:

ERS 101 is one of the top performance oil spill cleaner which can clean almost all kinds of oils and greases.

ERS 101 is a non-toxic, low-foaming, non skin irritating, biodegradable and environmental friendly oil spill cleaner. It is made of powerful Nano Biotech Colloidal Micelles (NBCM) of non-toxic natural plant extracts, plant derivatives and biodegradable surfactants. NBCM posses the power and capacity to break down almost all types of aqueous organic molecules and hydrocarbons. It can be used with either plain water or sea water without any difficulties.



ERS 101 does not contain acids, fragrance, petroleum distillates, soaps, chemical thickening agent, nitrate, enzyme, phosphate, synthetic alcohol, animal fatty acid, aliphatic and aromatic hydrocarbon toxic solvents, non-biodegradable surfactants, CFC and ozone depleting substances.

#### Application:

ERS 101 effectively removes oils, grease and odor. It is specially formulated for deep cleansing on rocks, soil and sand. It is a superb product for cleaning animal fur contaminated with oil and grease without irritating the animal skin. It can also be used to wash personal protective gear and tools during oil spill.

#### Directions:

**Rocks, soil and sand:** Apply desired amount of ERS 101 onto contaminated areas by either spraying or mopping. Leave it for at least 15 minutes. Rinse off thoroughly with either plain water or sea water. For seaside rocks and beach, after the application of ERS 101, leave it and wait for the sea water high tide to rinse it off.

**Animal fur:** Apply desired amount of ERS 101 onto the contaminated fur using hand. Lather and rinse off thoroughly with either plain water or sea water.

**Manufactured by:** Shemical International Sdn. Bhd. ( 647023-U )  
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<http://www.shemical.com>

Net weight:       1 kg                       5 kg                       20 kg

# SUPERSORB

### Product Description

Supersorb is developed by using the technology of high surface area mineral fillers and organic cellulose adsorbents. It uses the concept of “cellulose/filler attraction” or the force of adhesion between solid and liquid in cellulose / fillers.

Supersorb is a superior value product for commercial and household market. It can be applied from smooth to rough hard surfaces. The fine mineral fillers enable it to adsorb deep inside the pores of the rough surfaces. It gives a very clean and dry absorption over the spills. Because of the upper and lower crystal surface dissimilarity, the mineral fillers of Supersorb can bond to itself resulting most of the spills bond to each other in clumps. Thus, the spill can be easily sweep off and discarded.

### Application

Supersorb can be used on all hard surfaces for the following spills:

|               |               |          |                  |
|---------------|---------------|----------|------------------|
| Petrol        | Synthetic Oil | Diesel   | Solvents         |
| Crude Oil     | Cooking Oil   | Paraffin | Lubricants       |
| Urine         | Food          | Blood    | Human faeces     |
| Animal faeces | Sauces        | Drinks   | Wet cement       |
| Wet paint     | Food waste    | Wet mud  | Liquid detergent |

### Advantages

- Adsorbs variety of spills compared to other adsorbents
- Adsorbs all kind of liquid hydrocarbons
- Reduce the odour of the spill
- Require no secondary detergent wash
- Solvent free
- Spills bond with adsorbent in clumps
- Quick, safe and minimum leaching
- Harmless to human, animals and plants.

### Directions

Ensure the source of the spillage is stopped. Surround the spill with Supersorb and then spread the entire spillage with Supersorb evenly. Use a scoop rake or broom and move it back and forth over the spillage until the spillage is completely adsorbed and the surface is dry. It is important to spread enough Supersorb over the spillage in order to get a non slick surface. Sweep off the clump and discard it off. The surface is now clean and dry.



## MULTI-SPILL SORBENT

### Product Description

Multi-Spill Sorbent is developed by using the technology of high surface area mineral fillers and natural cellulose wood chips. It uses the concept of adsorption and dehydration.

Multi-Spill Sorbent is a superior value product for commercial and household market. It can be applied from smooth to rough hard surfaces. The mixture of chips and fine mineral fillers enable it to adsorb deep inside and outside of the rough surfaces.

### Application

Multi-Spill Sorbent can be used on all hard surfaces for the following spills:

|               |               |           |                  |
|---------------|---------------|-----------|------------------|
| Petrol        | Synthetic Oil | Diesel    | Oil sludge       |
| Crude Oil     | Cooking Oil   | Paraffin  | Vomit            |
| Animal faeces | Thick Sauces  | Wet paint | Liquid chemicals |

### Advantages

- Adsorbs variety of spills compared to other adsorbents
- Adsorbs all kind of oils
- Reduce the odour of the spill
- Solvent free
- Spills bond with adsorbent in clumps
- Quick, safe and minimum leaching
- Harmless to human, animals and plants.

### Directions

Ensure the source of the spillage is stopped. Surround the spillage with Multi-Spill Sorbent and then spread the entire spillage with Multi-Spill Sorbent evenly. Use a scoop rake or broom and move it back and forth over the spillage until the spillage is completely adsorbed and the surface is dry. It is important to spread enough Multi-Spill Sorbent over the spillage in order to get a non slick surface. Sweep off the clump and discard it off. The surface is now clean and dry.



# NEUTRALIZER ADSORBENT

### Product Description

Neutralizer Adsorbent is made of mineral fillers. It uses the concept of neutralization reaction and capillary attraction. Neutralizer Adsorbent can neutralise both acids and bases without spattering.

Neutralizer Adsorbent + Acid => Salt + Water + Carbon Dioxide

Neutralizer Adsorbent + Base => Salt + Water

Acid or base spill will decelerate once Neutralizer Adsorbent is applied. The volume of the liquid spill will decrease tremendously into salt, water and a small volume of carbon dioxide.

### Application

Neutralizer Adsorbent is a specific product developed to meet the specific needs of the acids and bases spillage of the following:

Chemical factories  
Chemical warehouses

Acid spill accidental area  
Base spill accidental area

Battery manufacturers  
Chemical cargo ships

### Advantages

- No spattering compared to other neutralization agents
- Biodegradable and Environmental friendly
- Can be used for both acid and base spills
- Fire resistant properties
- Reduce the volume of liquid acid or base spill to salts, water and carbon dioxide
- Reduce the odour of the spill
- Decelerate the moving acid or base spill
- No violent reaction
- Quick, safe and minimum leaching
- Non-toxic and harmless to human, animals and plants.

### Directions

Surround the acid or base spill with Neutralizer Adsorbent from the lowest level of the spillage area. Spread the entire spillage area with Neutralizer Adsorbent until reaction is observed. Use a non metal scoop or rake and move it back and forth until the spill is completely stopped and adsorbed to form clumps. The used material should be disposed according to the regulation of the local government.

For safety precaution, it is advisable to wear respirator and protective gloves and clothing while cleaning acid or base spill.



# HYDROCARBON ADSORBENT

## Product Description

Hydrocarbon Adsorbent is made of natural biodegradable organic cellulose fibre. It uses the concept of 'capillary attraction' between fibres. It only adsorbs oils, lubricants, fuels and other hydrocarbon fluids from water surface and leave water behind. With its high buoyancy and light weight, its hydrocarbon adsorption ratio capacity can reach up to a 25:1.

## Application

Hydrocarbon Adsorbent is a specific product developed to meet the specific needs of the following:

|                |                        |                |
|----------------|------------------------|----------------|
| Offshore rigs  | Refineries terminals   | Port           |
| Bulk terminals | Jetty                  | Marinas        |
| Petrol depot   | Beaches                | Mangrove areas |
| Marine park    | Marine accidental area | Fish farm      |

It is highly recommended to navy, port authority, ship operators, petrol chemical companies, municipal councils, agricultural department, drainage and irrigation department, environment department and fisheries department.

## Advantages

- Adsorbs oil and fuel from rivers, streams and oceans
- Environmental friendly posing no dangers to flora, fauna and aquatic life
- Reduce fire hazard around docks and piers
- Deodorise the odour of the spill
- Elimination nuisance and contamination problems
- Reduce clean up time after accidental spill
- Reduce contamination due to faulty oil water separator
- Quick, safe and minimum leaching
- Non-toxic and harmless to human, animals and plants.

## Directions

Surround the oil spill with Hydrocarbon Adsorbent socks or booms. Spread the entire area with Hydrocarbon Adsorbent until the spillage is completely covered. The wind and wave action will asserts Hydrocarbon to adsorb oil and fuel faster. The hydrocarbon can be retrieved by using nets. The used material should be disposed according to the local government regulations.

## **ACID & BASE ADSORBENT**

### **Product Description**

Acid & Base Adsorbent is made of biodegradable organic cellulose fibre. It uses the concept of 'capillary attraction' between fibres. It adsorbs acids, alkalis, solvents, oils and water based liquids. The 100% biodegradable organic cellulose fibre can soak up to 16 times its weight in liquids.

### **Application**

Neutralizer Adsorbent is a specific product developed to meet the specific needs of the acids and bases spillage of the following:

|                     |                            |                      |
|---------------------|----------------------------|----------------------|
| Chemical factories  | Acid spill accidental area | Battery manufacturer |
| Chemical warehouses | Base spill accidental area | Chemical cargo ships |

### **Advantages**

- Adsorbs acids, alkalis, solvents, oils and water based liquids from hard surface
- Environmental friendly and biodegradable organic cellulose posing no dangers to flora, fauna and aquatic life
- Elimination nuisance and contamination problems
- Reduce clean up time after accidental spill
- Decelerate moving acid and base spills
- Quick, safe and minimum leaching
- Non-toxic and harmless to human, animals and plants.

### **Directions**

Surround the spillage with Acid and Base Adsorbent socks or booms. Spread the entire area with adsorbent until the spill is completely covered. The used material should be disposed according to the local government regulations.

# MULTI-PURPOSE ADSORBENT

## Product Description

Multi-Purpose Adsorbent is made of biodegradable organic cellulose fibre. It uses the concept of 'capillary attraction' between fibres. It adsorbs non-aggressive liquids like oils, coolants and water based liquids. The 100% biodegradable organic cellulose fibre can soak up to 16 times its weight in liquids.

## Application

Multi-Purpose Adsorbent is a specific product developed to meet the specific needs of the general spillage of the following:

## Advantages

|                      |                               |                    |                              |
|----------------------|-------------------------------|--------------------|------------------------------|
| Petrol<br>Lubricants | Synthetic Oils<br>Cooking Oil | Diesel<br>Coolants | Solvents<br>Liquid chemicals |
|----------------------|-------------------------------|--------------------|------------------------------|

- Adsorbs non-aggressive liquids like oils, coolants and water based liquids from hard surface
- Environmental friendly and biodegradable organic cellulose posing no dangers to flora, fauna and aquatic life
- Elimination nuisance and contamination problems
- Reduce clean up time after accidental spill
- Decelerate moving spills
- Quick, safe and minimum leaching
- Non-toxic and harmless to human, animals and plants.

## Directions

Surround the spillage with Multi-Purpose Adsorbent socks or booms. Spread the entire area with adsorbent until the spill is completely covered. The used material should be disposed according to the local government regulations.

## EMERGENCY RESPONSE SPILL KITS



### Adsorbent Boom

Diameter = 6 in (152.4 mm)

Length = 10 ft (3048 mm)

Weight = 3.3 lb (1500 g)



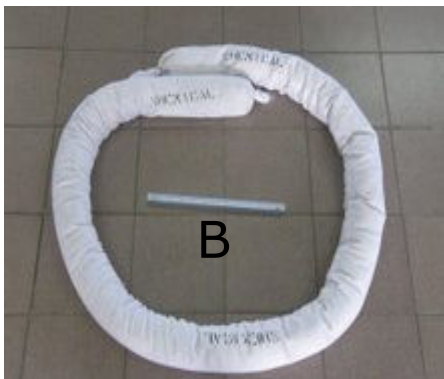
### Adsorbent Socks

#### Sock A

Diameter = 3 in (76.2 mm)

Length = 4 ft (1219.2 mm)

Weight = 0.44 lb (200 g)



#### Sock B

Diameter = 3 in (76.2 mm)

Length = 8 ft (2438.4 mm)

Weight = 0.88 lb (400 g)



### Adsorbent Pillows

#### Pillow A

10 in x 10 in (254 mm x 254 mm)

Weight = 0.11 lb (50 g)

#### Pillow B

20 in x 20 in (508 mm x 508 mm)

Weight = 0.33 lb (150 g)



**EMERGENCY RESPONSE SPILL KITS**



HEAVY DUTY DISPOSAL BAG



WARNING BARRIER TAPE



WARNING LABEL



CORROSIVE RESISTANT GLOVES



PROTECTIVE COATING



PLASTIC TIES



GOGGLE

## EMERGENCY RESPONSE SPILL KITS



Multi-Purpose Spill Kits  
5 Gallon (18.9L)



Oil Spill Kits  
5 Gallon (18.9L)



Acid & Base Spill Kits  
5 Gallon (18.9L)



Multi-Purpose Spill Kits  
20 Gallon (75.7L)



Oil Spill Kits  
20 Gallon (75.7L)



Acid & Base Spill Kits  
20 Gallon (75.7L)



Multi-Purpose Spill Kits  
30 Gallon (113.6L)



Oil Spill Kits  
30 Gallon (113.6L)



Acid & Base Spill Kits  
30 Gallon (113.6L)



Multi-Purpose Spill Kits  
85 Gallon (321.8L)



Oil Spill Kits  
85 Gallon (321.8L)



Acid & Base Spill Kits  
85 Gallon (321.8L)



Multi-Purpose Spill Kits  
95 Gallon (359.6L)



Oil Spill Kits  
95 Gallon (359.6L)



Acid & Base Spill Kits  
95 Gallon (359.6L)

## 5 gallons/18.9 liters Spill Response Kits

### Product Description

All Shemical's Emergency Response Spill kits come packed in easy-to-handle storage and shipping containers. Each kit is packed with high efficiency sorbents. Sorbents are made of biodegradable and environment friendly materials. It has economical re-fills, and individual kit components are always available separately.

### Application

- Handles more than 4 gallons/15.1 liters
- Ideal for shipping/receiving areas & work stations
- Easy to carry & easy to store

| Kit Components                      | Multi-Purpose Spill Kits | Oil Spill Kits | Acid & Base Spill Kits |
|-------------------------------------|--------------------------|----------------|------------------------|
| Sock: 3"x4' (76.2mmx1219.2mm)       | 4                        | 4              | 4                      |
| Sock: 3"x8' (76.2mmx2438.4mm)       | -                        | -              | -                      |
| Pillow: 10"x10" (254mmx254mm)       | 2                        | 2              | 2                      |
| Pillow: 20"x20" (508mmx508mm)       | 1                        | -              | 1                      |
| Paper Roll: 9"x9" (228.6mmx228.6mm) | 1                        | 1              | 1                      |
| Supersorb: 4.4lb (2kg)              | 1                        | 1              | -                      |
| Neutralizer Adsorbent: 4.4lb (2 kg) | -                        | -              | 1                      |
| Heavy Duty Disposal Bag             | 2                        | 2              | 2                      |
| Plastic Tie                         | 3                        | 3              | 3                      |
| Warning Labels                      | 2                        | 2              | 2                      |
| Warning Barrier Tape                | 1                        | 1              | 1                      |
| Corrosive Resistant Gloves          | 1                        | 1              | 1                      |
| Goggle                              | 1                        | 1              | 1                      |
| Protective Clothing, XL             | -                        | -              | -                      |
| Spill Kit Instructions              | 1                        | 1              | 1                      |

### 20 gallons/75.7 liters Spill Response Kits

#### Product Description

All Shemical's Emergency Response Spill kits come packed in easy-to-handle storage and shipping containers. Each kit is packed with high efficiency sorbents. Sorbents are made of biodegradable and environment friendly materials. It has economical re-fills, and individual kit components are always available separately.

#### Application

- Handles more than 15 gallons/56.8 liters
- Reusable container
- Include gloves and goggles for one worker
- Container can be used to temporarily stores used sorbents

| Kit Components                      | Multi-Purpose Spill Kits | Oil Spill Kits | Acid & Base Spill Kits |
|-------------------------------------|--------------------------|----------------|------------------------|
| Sock: 3"x4' (76.2mmx1219.2mm)       | 14                       | 14             | 14                     |
| Sock: 3"x8' (76.2mmx2438.4mm)       | -                        | -              | -                      |
| Pillow: 10"x10" (254mmx254mm)       | 5                        | 5              | 5                      |
| Pillow: 20"x20" (508mmx508mm)       | 2                        | -              | 2                      |
| Paper Roll: 9"x9" (228.6mmx228.6mm) | 1                        | 1              | 1                      |
| Supersorb: 4.4lb (2kg)              | 1                        | 1              | -                      |
| Neutralizer Adsorbent: 4.4lb (2 kg) | -                        | -              | 1                      |
| Heavy Duty Disposal Bag             | 3                        | 3              | 3                      |
| Plastic Tie                         | 4                        | 4              | 4                      |
| Warning Labels                      | 3                        | 3              | 3                      |
| Warning Barrier Tape                | 1                        | 1              | 1                      |
| Corrosive Resistant Gloves          | 1                        | 1              | 1                      |
| Goggle                              | 1                        | 1              | 1                      |
| Protective Clothing, XL             | -                        | -              | -                      |
| Spill Kit Instructions              | 1                        | 1              | 1                      |

## 30 gallons/113.6 liters Spill Response Kits

### Product Description

All Shemical's Emergency Response Spill kits come packed in easy-to-handle storage and shipping containers. Each kit is packed with high efficiency sorbents. Sorbents are made of biodegradable and environment friendly materials. It has economical re-fills, and individual kit components are always available separately.

### Application

- Handles more than 25 gallons/94.6 liters
- Reusable container
- Include gloves and goggles for two workers
- Container can be used to temporarily stores used sorbents

| Kit Components                      | Multi-Purpose Spill Kits | Oil Spill Kits | Acid & Base Spill Kits |
|-------------------------------------|--------------------------|----------------|------------------------|
| Sock: 3"x4' (76.2mmx1219.2mm)       | 14                       | 14             | 14                     |
| Sock: 3"x8' (76.2mmx2438.4mm)       | 3                        | -              | 3                      |
| Pillow: 10"x10" (254mmx254mm)       | 6                        | 6              | 6                      |
| Pillow: 20"x20" (508mmx508mm)       | 10                       | 4              | 10                     |
| Paper Roll: 9"x9" (228.6mmx228.6mm) | 2                        | 2              | 2                      |
| Supersorb: 4.4lb (2kg)              | 2                        | 2              | -                      |
| Neutralizer Adsorbent: 4.4lb (2 kg) | -                        | -              | 2                      |
| Heavy Duty Disposal Bag             | 4                        | 4              | 4                      |
| Plastic Tie                         | 5                        | 5              | 5                      |
| Warning Labels                      | 4                        | 4              | 4                      |
| Warning Barrier Tape                | 2                        | 2              | 2                      |
| Corrosive Resistant Gloves          | 2                        | 2              | 2                      |
| Goggle                              | 2                        | 2              | 2                      |
| Protective Clothing, XL             | -                        | -              | -                      |
| Spill Kit Instructions              | 1                        | 1              | 1                      |

## 85 gallons/321.8 liters Spill Response Kits

### Product Description

All Shemical's Emergency Response Spill kits come packed in easy-to-handle storage and shipping containers. Each kit is packed with high efficiency sorbents. Sorbents are made of biodegradable and environment friendly materials. It has economical re-fills, and individual kit components are always available separately.

### Application

- Handles more than 75 gallons/283.9 liters
- Reusable container
- Include protective equipments for two workers
- Container can be used to store and ship used sorbents

| Kit Components                      | Multi-Purpose Spill Kits | Oil Spill Kits | Acid & Base Spill Kits |
|-------------------------------------|--------------------------|----------------|------------------------|
| Sock: 3"x4' (76.2mmx1219.2mm)       | 15                       | 15             | 15                     |
| Sock: 3"x8' (76.2mmx2438.4mm)       | 10                       | 6              | 10                     |
| Pillow: 10"x10" (254mmx254mm)       | 30                       | 10             | 30                     |
| Pillow: 20"x20" (508mmx508mm)       | 40                       | 15             | 40                     |
| Paper Roll: 9"x9" (228.6mmx228.6mm) | 2                        | 2              | 2                      |
| Supersorb: 22lb (10kg)              | 1                        | 1              | -                      |
| Neutralizer Adsorbent: 22lb (10 kg) | -                        | -              | 1                      |
| Heavy Duty Disposal Bag             | 8                        | 8              | 8                      |
| Plastic Tie                         | 9                        | 9              | 9                      |
| Warning Labels                      | 8                        | 8              | 8                      |
| Warning Barrier Tape                | 3                        | 3              | 3                      |
| Corrosive Resistant Gloves          | 2                        | 2              | 2                      |
| Goggle                              | 2                        | 2              | 2                      |
| Protective Clothing, XL             | 2                        | 2              | 2                      |
| Spill Kit Instructions              | 1                        | 1              | 1                      |

### 95 gallons/359.6 liters Spill Response Kits

#### Product Description

All Shemical's Emergency Response Spill kits come packed in easy-to-handle storage and shipping containers. Each kit is packed with high efficiency sorbents. Sorbents are made of biodegradable and environment friendly materials. It has economical re-fills, and individual kit components are always available separately.

#### Application

- Handles more than 80 gallons/302.8 liters
- Reusable container
- Include protective equipments for two workers
- Container can be used to store and ship used sorbents

| Kit Components                      | Multi-Purpose Spill Kits | Oil Spill Kits | Acid & Base Spill Kits |
|-------------------------------------|--------------------------|----------------|------------------------|
| Sock: 3"x4' (76.2mmx1219.2mm)       | 15                       | 15             | 15                     |
| Sock: 3"x8' (76.2mmx2438.4mm)       | 12                       | 8              | 12                     |
| Pillow: 10"x10" (254mmx254mm)       | 30                       | 10             | 30                     |
| Pillow: 20"x20" (508mmx508mm)       | 48                       | 16             | 48                     |
| Paper Roll: 9"x9" (228.6mmx228.6mm) | 3                        | 3              | 3                      |
| Supersorb: 22lb (10kg)              | 1                        | 1              | -                      |
| Neutralizer Adsorbent: 22lb (10kg)  | -                        | -              | 1                      |
| Heavy Duty Disposal Bag             | 10                       | 10             | 10                     |
| Plastic Tie                         | 11                       | 11             | 11                     |
| Warning Labels                      | 10                       | 10             | 10                     |
| Warning Barrier Tape                | 3                        | 3              | 3                      |
| Corrosive Resistant Gloves          | 2                        | 2              | 2                      |
| Goggle                              | 2                        | 2              | 2                      |
| Protective Clothing, XL             | 2                        | 2              | 2                      |
| Spill Kit Instructions              | 1                        | 1              | 1                      |