



# Accell Clean® Surface Washing Agent

## Description

Accell Clean® Surface Washing Agent is a heavy-duty cleaning agent, which is listed on the U.S. EPA National Contingency Plan Product Schedule for Surface Washing Agents, designed for cleaning oil-contaminated surfaces, including contaminated shorelines, mangroves or sea grasses resulting from oil spills. Our product accelerates that natural bio-degradation of organic contaminants safely, rapidly, and in an environmentally friendly manner.

Accell® Clean SWA incorporates a unique patented technology that amplifies the ability of surfactants to penetrate, lift, and clean contaminants from surfaces faster and more efficiently than other surfactants or traditional cleaners that depend on solvents and caustic chemicals to achieve their cleaning power.

Accell® Clean SWA has applications in disaster related contamination such as structures, equipment, rail systems, streets, walls, floors, and sewer areas.

## Benefits

### TECHNICAL

- ✓ Does not depend on solvents or caustics
- ✓ pH neutral
- ✓ Stimulates biodegradation of residuals of oils in water/soil/sand
- ✓ Controls H<sub>2</sub>S production in sewers
- ✓ Non-flammable
- ✓ Readily biodegradable

### OPERATIONAL

- ✓ Safe for worker and environment
- ✓ No extra PPE needed
- ✓ EPA listed
- ✓ FDA, USDA certified
- ✓ US Coast Guard approved
- ✓ Heavy-duty marine quality

### FINANCIAL

- ✓ F Fast working, saves up to factor 5 or 80% in project time
- ✓ Lower port fees, faster exit
- ✓ 15% chemical cost reduction
- ✓ Much lower project cost, no extra PPE, vent/exhaust needed
- ✓ No cost for recoating or repainting surfaces

**TIME SAVING:** For the cleaning of ships, oil booms and other equipment involved in the clean-up process, the application of Accell SWA results in considerable savings in time and manpower, as experienced during the 2010 clean-up of the Gulf of Mexico oil spill, where Accell® Clean SWA was used extensively. Cleaning of HFO pumps dropped from 6 men cleaning in 150 minutes using a pH 12.8 cleaner to 2 men cleaning in 30 minutes using Accell's pH 8.1 cleaner, with the same result.

**REMEDIATION:** After cleaning, Accell® Clean SWA stimulates removal and bio-degradation of residual oils, hydrocarbons and organic contaminants in water, soil, or sand substrates.

**ODOR CONTROL:** The Accell® Clean technology is utilized to eliminate grease, oil and biofilm in sewer systems and to control hydrogen sulfide (H<sub>2</sub>S) production. A two-year study in the Washington DC municipal sewer system has extensively demonstrated the ability of Accell® to control H<sub>2</sub>S in sewer lines by eliminating biofilm which is the source of the odor.

**SAFETY:** Because Accell® Clean SWA is pH neutral, the safety profile greatly reduces the potential for reportable chemical related injuries compared to the high pH products previously used for clean-ups.

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## Benefits

**ENVIRONMENTALLY FRIENDLY:** Accell® Clean SWA is safe for the environment and is readily biodegradable, is non-flammable, and does not contain, nor is it manufactured with ozone-depleting substances. Accell® Clean SWA contains no heavy metals, cyanide, or chlorinated hydrocarbons.

**CERTIFICATION:** Accell® Clean SWA is listed on the us EPA's National Contingency Plan Product Schedule. FDA & USDA certified as containing only ingredients recognized as safe in food grade applications. US Coast Guard approved.

## Instructions for Use

### For cleaning shoreline / mangrove / sea grass rocks:

1. Spray Accell Clean® SWA onto oil-contaminated surface at full strength
2. Allow to soak for 15-30 minutes
3. Rocks may be scrubbed with stiff bristle brush where appropriate
4. Rinse with fresh or salt water as appropriate

### For weathered crude oil on sand:

Recommended application rate is 1 liter per 4 m<sup>2</sup>, dependent on amount of oil and the degree of weathering.

1. Prepare a cleaning solution of 0.25-2.0% of Accell Clean® SWA using fresh or salt water
2. Transfer oil-contaminated sand to sand washing equipment
3. Agitate sand with Accell Clean® SWA solution. The SWA will lift the oil from the sand due to its low interfacial tension.
4. Collect the oil/product residue from the water's surface using skimmers, absorbent pads, or other conventional means.
5. Remove water from sand by centrifuge
6. Dispose of used clean up residue in accordance with local, state, and federal regulations. Dispose of clean sand as appropriate. Accell Clean® SWA solution can be recycled after centrifuge.



Cleaning with beach cleaning machine using Accell® Clean SWA.



Left: Oil contaminated sand before cleaning Accell® Clean, right same sand after cleaning with Accell® Clean SWA, 3:14 min later.



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## Instructions for use

### For use on heavy crude oil in tanks / barges / fracks / ships:

Dilute 25% Accell Clean® SWA with 75% fresh or seawater. (For example: add 250 liters of Accell Clean® SWA to 750 liters of fresh or seawater for 1000 liters of mixed solution).

1. Heat cleaning solution to 60°C and spray at high pressure
2. Recycle this with 100 liters Accell Clean® SWA into second tank
3. Repeat step 3 in third tank
4. Wash for one (1) hour in each tank
5. Rinse tank 1 with 1 drum (208 liters) Accell Clean® SWA and 4000 liters of hot water
6. Rinse for one (1) hour
7. Send to second and third tanks rinsing one (1) hour each
8. Inspect and if needed rework with rinse solution
9. Rinse with power washer using fresh or seawater

### For use with heavy crude on booms:

Dilute 1 part Accell Clean® SWA with 4 parts fresh or seawater

1. Spray booms with water
2. Spray booms with Accell Clean® SWA solution
3. Let sit for ten (10) minutes
4. Reapply Accell Clean® SWA solution
5. Brush with deck brush
6. Rinse with power washer using fresh or seawater
7. Inspect
8. Spot treat if necessary

### For use with heavy crude on tools, boots, equipment, etc:

Dilute 1 part Accell Clean® SWA with 4 parts fresh or seawater

1. Spray with Accell Clean® SWA solution
2. Let it sit for ten (10) minutes
3. Spray again with Accell Clean® SWA
4. Wipe
5. Rinse with power washer using fresh or seawater

### For use with heavy crude on boots:

1. Put solution in boot rinsing tubs at 1 part Accell Clean® SWA with 16 parts water.



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## Instructions of use

### For use with heavy crude on decks:

Dilute 1 part Accell Clean® SWA with 4 parts fresh or seawater

1. Spray deck with Accell Clean® SWA solution
2. Let sit for ten (10) minutes
3. Spray again with Accell Clean® SWA solution
4. Scrub with deck brush
5. Rinse with power washer using fresh or seawater
6. Dispose of treated bilge water properly into an authorized pump station

### For use on bilge cleaning for small recreational boats:

For every 10 liter of water in bilge, add 150 ml of Accell Clean® SWA

1. Apply 100 ml of Accell Clean® SWA for every 15 meter of boat length into the bilge
2. The pitching and rolling of the craft will mix the product with the bilge water
3. The movement will also promote oxygen transfer in the upper layer of the bilge water
4. Dispose of treated bilge water properly into an authorized pump station

### For use with head treatment for small recreational boats:

1. Mix 150 ml of Accell Clean® SWA with 0.5 liter of water and flush down the head.

### For use with tar sand oil:

**Don't dilute**, use full-strength of Accell Clean® SWA

1. Spray water to thoroughly wet surface being cleaned
2. Spray Accell Clean® SWA to thoroughly cover surface being cleaned
3. Agitate Accell Clean® SWA into surface with cleaning pad or brush
4. Allow fifteen (15) minutes for Accell Clean® to work and penetrate surface
5. Lightly re-spray surface with water, especially if surface dried due to heat or hot weather
6. Spray Accell Clean® SWA again (full-strength)
7. Agitate Accell Clean® SWA into surface with cleaning pad or brush
8. Allow ten (10) minutes for Accell Clean® SWA to work and then wipe clean
9. Repeat steps 1-8 as needed

### For use with WTI or Louisiana light crude oil:

**Dilute** 1 part Accell Clean® SWA with 4 parts fresh or seawater

1. Spray water to thoroughly wet surface being cleaned
2. Spray Accell Clean® SWA to thoroughly cover surface being cleaned
3. Agitate Accell Clean® SWA into surface with cleaning pad or brush
4. Allow fifteen (15) minutes for Accell Clean® to work and penetrate surface
5. Lightly re-spray surface with water, especially if surface dried due to heat or hot weather
6. Spray Accell Clean® SWA again [4:1 dilution]
7. Agitate Accell Clean® SWA into surface with cleaning pad or brush
8. Allow ten (10) minutes for Accell Clean® SWA to work and then wipe clean
9. Repeat steps 1-8 as needed



# Accell Clean® Surface Washing Agent

## Instructions of use

### For use with kerosene and light oils:

Dilute 1 part Accell Clean® SWA with 10 parts fresh or seawater. Dilution rate depends on amount of kerosene or light oils.

1. Spray water to thoroughly wet surface being cleaned
2. Spray Accell Clean® SWA to thoroughly cover surface being cleaned
3. Agitate Accell Clean® SWA into surface with cleaning pad or brush
4. Allow fifteen (15) minutes for Accell Clean® to work and penetrate surface
5. Lightly re-spray surface with water, especially if surface dried due to heat or hot weather
6. Spray Accell Clean® SWA again [20:1 dilution]
7. Agitate Accell Clean® SWA into surface with cleaning pad or brush
8. Allow ten (10) minutes for Accell Clean® SWA to work and then wipe clean
9. Repeat steps 1-8 as needed

### For cleaning mold on outside patios:

1. Spray Accell Clean® SWA to thoroughly drench the surface
2. Let sit for five (5) minutes
3. Lightly re-spray surface if dried due to heat or hot weather
4. Agitate Accell Clean® SWA into surface with cleaning pad or brush
5. Rinse with water hose
6. Let air dry

## Typical Properties

- ✓ Flash Point: >82°C
- ✓ Pour Point: -12°C
- ✓ Viscosity: 68 SUS @15°C
- ✓ Specific Gravity: 1.0141 @15°C
- ✓ pH: 7
- ✓ Solubility: Soluble in fresh or seawater
- ✓ Available in 1L spraybottles, 5L cans, 20L pails, 208L drums and 1000 liter IBC