Appendix F: Absorbent Materials in Spill Kits

1. Ecospill Elite Chemical Spill Kit (15 l)

These are basic kits and are packed in distinctive yellow holdalls (**A**):

Each kit contains:

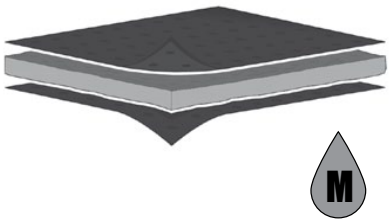
- 1 Absorbent boom (**B**) for use to contain a spill.
- 8 Absorbent pads (**C**) for use directly on a spill for absorption.
- 2 Hazardous waste bags & Ties (**D**) for disposal of contaminated booms and pads.
- 1 Instruction Leaflet.

The pads and absorbent boom are of the yellow 'Chemical' or 'C' type for spills involving water, oils, and aggressive liquids (*i.e.* acids and bases). These kits do not contain chemically-resistant gloves, acid/base neutralising agents and other equipment such as a dustpan and brush or pH paper.

2. Types of Absorbent Material

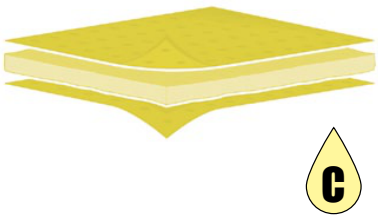
These guidelines apply to <u>any</u> chemical spill kit used in the department.

Industry colour coding for absorbents



Maintenance Grey/Black
For use inside on spills of non aggressive water and oil based fluids and mild chemicals.

Oil Only White
For the preferental absorption of oil based liquids on land or water, including vegetable oil, mineral oil and most hydrocarbon derivatives.



Chemical Yellow
For use on spills of aggressive liquids *i.e.* acids and alkalis. Can be safely used on water and oil based spills. For use on land only.

*Ecospill absorbents are tested to BS7959 and meet the BS standards for the colour coding of absorbents.

3. Absorbent Material Compatibility

Absorbent Compatibility Guide.

This information is provided as a guide only. It is assumed that Chemicals are at an ambient temperature and pressure and are used in their basic state not mixed or in combination. We strongly recommend that for specific applications you contact Cromwell. Small test sampling by the user is always recommended to ensure safe application. No claims or warranties are expressed or implied as to the absolute accuracy of the data supplied.

Maintenance - Grey/Black. For use inside on spills of non aggressive Water and Oil based fluids and mild Chemicals.

Oil Selective- White. For the preferential absorption of Oil based liquids on land or water. Including Vegetable oil, Mineral oil and most Hydrocarbon derivatives.

Chemical- Yellow. For use on spills of aggressive liquids i.e. Acids and Alkalis. Can be safely used on Water and Oil based spills. For use on land only.

Liquid	Maintenance	Oil Selective	Chemical	Liquid	Maintenance	Oil Selective	Chemical
Acetaldehyde	✓		✓	Carbon Disulphide	✓		✓
Acetic Acid			✓	Carbon Tetrachloride	✓	✓	✓
Acetic Acid Amyl Ester	✓	✓	✓	Castor Oil	✓	✓	✓
Acetic Anhydride	✓		✓	Chloracetic Acid			✓
Acetone	✓	✓	✓	Chlorbenzine	✓		✓
Acetyl Chloride	✓	✓	✓	Chlorine	✓		✓
Acrolein		✓	✓	Chlorine Soda			✓
Acrylic Acid			✓	Chloroform	✓	✓	✓
Acrylic Emulsions	✓		✓	Chlorosulphuric Acid			✓
Acrylonitrile	✓		✓	Chlorox (Full Bleach)			✓
Allyl Alcohol	✓		✓	Chromic Acid (50%)			✓
Aminobenzoic Acid			✓	Citric Acid			✓
Ammonia Anhydrous	✓	✓	✓	Corn Oil	✓	✓	✓
Ammonium Hydroxide	✓	✓	✓	Cotton Seed Oil	✓	✓	✓
Amyl Acetate		✓	✓	Cresol	✓	✓	✓
Amyl Alcohol	✓		✓	Cyclohexane	✓	✓	✓
Aniline	✓		✓	Detergents	✓		✓
Aqua Regia	✓		✓	Dichlorbenzol	✓	✓	✓
Aviation Fuel	✓	✓	✓	Diethyl Amine	✓	✓	✓
Benzene*	✓	✓	✓	Diethyl Ether	✓	✓	✓
Benzoic Ether	✓	✓	✓	Di-Nitrobenzene	✓	✓	✓
Benzonitrile	✓		✓	Dioxan	✓		✓
Benzyl Alcohol	✓		✓	Discooctyl Phthalate	✓	✓	✓
Benzyl Chloride	✓		✓	Ether	✓	✓	✓
Boric Acid			✓	Ethyl Acetate	✓	✓	✓
Brake Fluid	✓	✓	✓	Ethyl Alcohol	✓	✓	✓
Bromine (inorganic)*	✓		✓	Ethyl Chloride*	✓	✓	✓
Butyl Acetate	✓	✓	✓	Ethyl Ether	✓	✓	✓
Butyl Alcohol	✓	✓	✓	Ethylene Glycol	✓		✓
Butylamine	✓		✓	Ethyl Proianate	✓	✓	✓
Butyric Acid			✓	Formaldehyde	✓		✓
Calcium Hydroxide	✓		✓	Formic Acid			✓
Carbolic Acid			✓	Fuel Oil	✓	✓	✓

continued…

Absorbent Compatibility Guide.

Liquid	Maintenance	Oil Selective	Chemical	Liquid	Maintenance	Oil Selective	Chemical
Galvanic Liquids	✓		✓	Phenyl Formic Acid			✓
Gearbox Oil	✓	✓	✓	Phosphoric Acid			✓
Glacial Acetic Acid	✓		✓	Potassium Hydroxide	✓		✓
Glycerol	✓		✓	Propanol	✓		✓
Heptane	✓	✓	✓	Propionic Acid			✓
Hexane	✓	✓	✓	Propyl Alcohol	✓	✓	✓
Hydrazene	✓		✓	Propylene Glycol	✓	✓	✓
Hydrochloric Acid			✓	Quinoline	✓		✓
Hydrofloric Acid			✓	Resorcinol	✓		✓
Hydrogen Cyanide	✓	✓	✓	Saccharose	✓		✓
Hydrogen Peroxide	✓		✓	Salt Solution (Metallic)	✓		✓
Isobutyl Alcohol	✓	✓	✓	Silicone Oil	✓	✓	✓
Isobutyric Acid	✓	✓	✓	Silver Nitrate	✓		✓
Isopropyl Acetate	✓	✓	✓	Soap Solutions	✓		✓
Isopropyl Alcohol	✓	✓	✓	Sodium Bicarbonate	✓		✓
Kerosene	✓	✓	✓	Sodium Chloride	✓		✓
Keytone	✓	✓	✓	Sodium Hydroxide	✓		✓
Linseed Oil	✓	✓	✓	Sodium Nitrate	✓		✓
Lubricating Oil	✓	✓	✓	Stannic Chloride	✓		✓
Magnesium Oxide Hydrate	✓		✓	Starch	✓		✓
Methyl Alcohol	✓	✓	✓	Styrene	✓	✓	✓
Methyl Chloride	✓	✓	✓	Sucrose	✓		✓
Methyl Ether	✓	✓	✓	Sulphuric Acid*			✓
Methyl Ethyl Ketone	✓	✓	✓	Synthetic Motor Oil	✓	✓	✓
Methyl Methacrylate	✓	✓	✓	Tannic Acid			✓
Methyl Propianate	✓	✓	✓	Tin Chloride	✓		✓
Milk	✓		✓	Toluene*	✓	✓	✓
Mineral Oil	✓	✓	✓	Transformer Oil	✓	✓	✓
Mineral Spirits	✓	✓	✓	Trichlorethylene*	✓	✓	✓
Motor Oil	✓	✓	✓	Triethylene Glycol	✓	✓	✓
Naphtalene			✓	Turpentine*	✓	✓	✓
Nitric Acid*			✓	Urine	✓		✓
Nitrobenzene Acid			✓	Vinegar	✓		✓
Nitrobenzol	✓		✓	Vinyl Acetate	✓		✓
Nitrotoluen	✓	✓	✓	Water	✓		✓
Octane	✓	✓	✓	Xylene*	✓	✓	✓
Oleic Acid	✓	✓	✓	**Notes:**			
Olive Oil	✓	✓	✓				
Parraffin	✓	✓	✓				
Perchlorethylene*	✓	✓	✓				
Petroleum Ether	✓	✓	✓				
Phenol	✓		✓				

***These fluids will react with Polypropylene causing it to degrade.**

J M Sanderson, 22 August 2019. (Review date: 22 August 2020)