Almost Every Workplace Contains Unnecessary Hazardous Chemicals

Meet your duty of care by substituting with Worksafe and Environmentally Sustainable alternatives.

For a Better World
Mitigating Chemical Risks with Safer, More Effective Substitutes

At Environmental Fluid Systems we have a vision for a better world - a world where toxic and hazardous chemicals are no longer commonplace. A world where workplace hazards are mitigated by removal of the threat itself, instead of complicated safety procedures or PPE.

That’s why for the past 15 years we have relentlessly sought out the best science can offer, to find responsible, high performance replacements for some of the world's most commonly used toxic and dangerous chemicals - many of which are widely used in Defence and the maritime industry.

Safe chemistries are evolving rapidly, but the culture of community leading organisations needs to adapt also. Right now too many people are unnecessarily using toxic chemicals that put people’s health at risk, harm the environment and harm productivity. With support from organisations such as Defence and Industry we hope to change that.

At EFS we’re deeply passionate about what we do; and why wouldn’t we be? What we do improves people's lives, improves business, and opens up new realms of innovation - For a Better World.

Improving Lives

We improve lives by drastically reducing Health & Safety risks in the workplace, as well as the long term illnesses caused by many common chemicals. We free workers from worry, and reduce the need for PPE, making people healthier, happier and more productive. EFS chemistries also look after the environment, and are as gentle on the planet as they are on humans.

Improving Business

Reducing risk is an integral part of business. EFS chemistries reduce Health & Safety risks, and WHS and environmental compliance costs. Safer chemicals mean easier and more efficient handling which increases productivity, boosts morale, reduces waste and enhances public image through positive initiatives.

Improving Innovation

Safer chemicals doesn’t mean lower performance, in fact in most cases EFS substitutes are actually more effective than the toxic chemicals they replace. Because they are safer and more targeted in their action, our chemistries open up completely new applications for forward thinking Defence innovators.

For a Better World
Responsible High Performance Products for Forward Thinking Leaders

Key Maritime Applications

Workshops & Maintenance
EFS have Australia’s largest range of safe and effective workshop and maintenance chemicals, acids, and solvents including safe degreasers, acids, solvent alternatives for MEK, acetone, toluene and gun wash blends. EFS has a safer solution for all cleaning and maintenance applications - particularly in challenging maritime environments. Applications include cleaners, degreasers, workshop solvents, weapons cleaner, electrical contact cleaners and parts washing solutions.

Wastewater Treatment & Odour Control
triple7 water treatment solutions are bio based, non-ionic, linear alcohol surfactants, that have distinct advantages in waste water management on board ships, in ports facilities and on land. triple7 organic products are free of toxic and hazardous ingredients and are a new direction in overcoming waste problems caused by traditional treatment chemicals. triple7 products neutralise odours; strip pipework of effluent deposits; separate fats, oils and greases; help break down solids; and are a powerful yet safe cleaning solution.

Deck and Equipment Wash Down
triple7 cleaning and degreasing products lift & release contaminants from equipment and paintwork without using toxic & hazardous components, making them safe for workers and marine environments. They protect metal finishes, and can be used on all surfaces including duco, glass, chrome, stainless steel, plexi-glass, rubbers, plastics, vinyl & canvas. All triple7 products are designed to support safer and more effective management of waste-water and run-off. The triple7 product range also includes aircraft approved cleaners.

Scale Removal
triple7 scale and calcium removal chemistries are powerful and sustainable alternatives, especially designed for use in closed circuit applications and enclosed environments where human safety is the highest priority. triple7 Descalers are non-toxic and non-hazardous, designed for effectiveness and safety to workers, the cleaning surface and the environment. triple7 Scale Removers will not harm equipment and give longer life cycle maintenance and consequent cost advantages. Applications include; pipework, heat exchangers, boilers, condensers, wet-scrubbers and chillers.

Specialist Applications
The EFS range includes products designed for specialist applications including low hazard weapons cleaners, approved aircraft cleaners, aircraft transportable solvents and products specifically suited to seaborn and deployed operations, where waste water management infrastructure is limited. Ecotoxicology - meets the Australian 2012 Oil Spill Control Agents requirements and is overall practically non-toxic (IMO/GESAMP classification).
Case Studies

ANZAC Frigates
Over three days of testing, Confined Space Permits for Foxtrot V1 and V2 the sewage tanks could not be obtained due to excessive H2S and CO readings. H2S readings in one of the tanks was measured at over 130ppm with CO gas peaking above 280ppm.

To rectify the situation 5 litres of triple7 Odour Control (NSN: 6840 661597256) was applied to each tank and left for 48 hours before testing again. These tests revealed that H2S readings had dropped dramatically to 2ppm with CO reading at zero. Confined Space Permits were then issued and maintenance work could continue.

AWD Ship Building
Cleaning surfaces with Acetone prior to welding is common however the resultant vapour produced at high temperatures can cause irreparable liver damage if inhaled. Acetone also presents a fire risk in this type of environment.

Acetone was replaced with purasolve Surface Prep at an AWD ship building facility to remove these risks. The non-toxic purasolve product, which evaporates slower than Acetone, provided better performance at lower costs, with the safety solvent lasting at least ten times as long as previous solvents.

Helicopter Transportable Solvents for Offshore Maintenance
In the offshore oil and gas industry many maintenance operations require the use of strong solvents and other potentially hazardous chemicals which cannot be transported on aircraft. These highly flammable and toxic products also create a range storage, handling and waste disposal issues on the offshore platform itself.

For Exxon's critical maintenance at sea they choose purasolve safety solvents which can be safety transported on helicopters and have no special storage or handling requirements. These solvents last longer because they are also slow to evaporate and can also be recycled for extended periods, meaning overall lower chemical inventory and waste minimisation.

For further information and ordering contact us on 1800 777 580 or sales@efsgroup.com.au
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