

Guidance for Buyers of Cleaning Chemicals

Buyers of cleaning and hygiene chemicals need products which are fit-for-purpose have good environmental and safety credentials, and are sold at a reasonable price. But it is difficult to discern product information you can trust from the irrelevant, meaningless and unsubstantiated sales and marketing claims made for some products. This Glossary has been designed to help buyers differentiate between meaningful product claims and meaningless marketing 'hype'.

The terms

Biodegradable

Any claims made should be transparent, verifiable and supported by standards that define the scope, i.e. the reference framework, the testing methodologies and criteria to be used.

The term 'biodegradable' as it is applied to cleaning products, is defined in current legislation (Detergent Regulation (EC) No 648/2004 and corresponding UK post Brexit legislation). It requires that surfactants used in cleaning products must 'mineralise' i.e. breakdown to water and carbon dioxide within a defined period after release to a foul sewer. Given this is a legal requirement for all surfactants in the EU and UK, it is meaningless for any given supplier to declare their product is 'biodegradable'; if it were not, it would be illegal.

Where claims are made on other ingredients, these claims should be based on appropriate test methods. It should be clear if they are readily biodegradable or otherwise. If a biodegradability claim relates to the packaging, this needs to be explicit. Within the scope of cleaning products, a claim can only be made in relation to the surfactants and should not be product specific.

Chemical-free

This term is meaningless, but often used to imply non-toxicity (see below) or that the product is plant-based (see below) or natural (see below). However, technically everything, including water, plant-based biocides or enzymes, are made of chemicals, so the claim is nonsense. When presented with such claims, ask what is meant and request technical justification.

A lot needs to be considered when selecting the correct cleaning product for a specific application. Dirt generally comprises organic (carbon-based) matter and mineral soils, and the microbes that live and breed in them. Dirt can be attached to all sorts of surfaces. It cannot be shaken off or brushed away by mechanical action alone. Chemical & mechanical action are jointly required to achieve meaningful cleaning results.

Eco-friendly / environmentally-friendly

This term, used in relation to the product, implies it is not environmentally harmful. However, it does not mean the product is organic (see below). It does not mean the product is natural (see below). The term may only refer to the product itself. It may not refer to the packaging, the production and distribution processes, or the method of application and use. To be meaningful, this term must be defined in relation to all aspects of the product in question and be substantiated across the full product lifecycle.

Natural

The implication of natural is that the product exists in or is produced by nature. It contains no synthetic or artificially made ingredients. The suggestion is it is safer for people and the environment and more sustainable. The evidence does not support this. Substances synthesised by chemists are not systematically more toxic than those synthesised by nature. Naturally occurring ingredients can also be harmful or abrasive. For example, one of the most toxic substances known is the Botulinum toxin, a natural chemical produced by *Clostridium botulinum* bacteria. It is otherwise known as Botox, showing it can be the quantity used rather than the chemical itself that matters.

Non-toxic

The implication is the product poses no risk if ingested by adults, children or animals or if released the environment. Toxicity depends on a range of things including concentration, volume and method of use. Without further qualification, this term can be dangerously misleading and could pose a risk to health. Specifically, if a product is ingested and immediate medical intervention is delayed because the product is described as 'non-toxic'.

Organic

Organic chemistry is a subdiscipline within chemistry involving the scientific study of the structure, properties, and reactions of organic compounds and organic materials, i.e., matter in its various forms that contain carbon and hydrogen. All living things on earth contain carbon.

The term organic can have several meanings:

- Based on carbon chemistry.
- The item has been certified by the Soil Association.
- More loosely, it can imply the item is derived from living organisms.

When faced with such claims, it is important to ask for clarification and verifying evidence.

Pet-friendly / safe for pets

Buyers may believe products labelled as pet-friendly or safe for pets can be touched, inhaled or consumed by pets with no risk. There is no guarantee this is the case. There is no actual definition / criteria for making this claim.

The term must be accompanied with relevant safety data to have any meaning.

The ingredient most commonly a concern in relation to pets is benzalkonium chloride (BKC). BKC is probably the most common ingredient of sanitisers and disinfectants. Whilst there are documented cases of animals being adversely affected by BKC, it is so widely used that pets are probably exposed to it on a regular basis with no ill effects.

Sales and Marketing claims

Plant-based

This implies the active ingredient is sourced from plants. Implicit within the terms is the suggestion it must be better for the environment or is less hazardous than products based on synthetic detergents.

It is important to note almost all plant-based components are heavily processed through carbon intensive (energy intensive) chemical plants. Ask your supplier to be more specific.

Professional standard

The regulatory standards for products 'for professional use' differ from those for consumer products. This includes the method of application and the training required to use them safely.

'Professional use only' products are intended for use in a work environment only after the usage instructions and a Safety Data Sheet (SDS) have been reviewed, a risk assessment performed, and the appropriate training and PPE (Personal Protective Equipment) issued to the operative.

Products labelled 'for professional use only' should not be sold to the general public because there may be insufficient information on the label to enable their safe use by non-professionals.

The same formulations may be offered for sale to the general public but the information on the label has to be sufficiently clear to allow the product to be used safely by an untrained member of the public. These can be labelled as 'Professional Formulation' or 'as used by professionals'.

Sustainable

This is a vague term. Companies are making efforts to become more sustainable but where this word appears on a product look for evidence to support why the product is sustainable.

Product Claims

Less reputable organisations make many sales and marketing claims for products, which require further clarification to be valid.

For example:

- The world's most sustainable (insert the product type): how is this defined and measured?
- 100% recycled plastic: does this relate to the whole product or packaging or only one element?
- X% less energy or water consumption: what are the comparator and conditions.

Lifecycle Claims

There are a lot of claims about Post Consumer Recycled (PCR) content. However, it may not be the appropriate option.

Factors including longevity and durability need to be considered. For example, when offering a refill option, a PCR solution may not offer the durability required. It may fail before a virgin plastic bottle, creating more waste.

Advice to buyers

Consideration should also be given to transport miles. For example, is the product being produced in the UK or sourced from China? The transport miles may have a greater environmental impact than UK sourced virgin material.

Recyclability also needs to be considered. A virgin container for example can be recycled multiple times before it can no longer be used. The PCR content may be coming to the end of its recyclability.

Our advice to buyers is simple. 'Be cautious.'

- Be sceptical. If a claim sounds too good to be true, it probably is.
- Ask for supporting evidence. Reputable companies should be willing and able to show you data sheets, reports, certificates or other evidence to support the claims made for their products.
- Ask for test reports to show conformance to specification or the micro profile when looking at biocidal products. This will show the dilution rates and conditions under which the product will eliminate particular organisms.
- Buy from a reputable supplier with a track record.
- Specify CHSA Accreditation. Our Standards, Your Guarantee.

Every CHSA member is a member of the relevant Accreditation Scheme. It means they are audited annually by the Association's Independent Inspector against the specification of the Scheme. They have all also signed the CHSA's rigorous Code of Practice, which incorporates the Competition and Markets Authority's Green Claims Code. The combination means every member:

- Trades ethically and sustainably;
- Provides supporting information for claims made;
- Provides quality, fit for purpose products; and
- Makes sure what's on the box is what's in the box.