Miracle Mineral Solution and Sodium chlorite solutions

Miracle Mineral Solution (MMS) and Sodium chlorite solutions, their danger to health and what the National Food Crime Unit (NFCU) are doing to prevent them being sold and or consumed.

MMS stands for a variety of product names, most commonly Miracle Mineral Solution.

MMS typically describes a solution containing the chemical sodium chlorite, which at high strengths is used as a bleach.

The term Chlorine Dioxide Solution (CDS) is also used to refer to sodium chlorite solutions. Weaker solutions have also been marketed as Aerobic Oxygen.

Sodium chlorite does have approved uses in some countries as a surface cleaner for areas used for food preparation.

It can sometimes be described as food grade but this should not be taken to imply that it is safe for consumption. It is also frequently marketed as a water purification chemical.

The aim of both products is to release chlorine dioxide gas, which is sometimes claimed to have a purifying effect when it takes place inside the body.

Danger to health

Sodium chlorite products vary in concentration, specific dosage and method of ingestion.

With products of weaker strength, any health impact from consuming these products is likely to be gastrointestinal irritation.

For stronger products, the effects can be severe nausea, vomiting and diarrhoea, potentially leading to dehydration and reduced blood pressure.

If the solution is diluted less than instructed, it could cause damage to the gut and red blood cells, potentially resulting in respiratory failure.

Alleged therapeutic benefits

There are a range of alleged health benefits related to these products and all are unlikely to be authorised. There are a range of alleged health benefits related to these products and all are unlikely to be authorised. Only nutrition claims listed in the GB NHC Register may be used in Great Britain.

Health and nutrition claims are required to be authorised under assimilated Regulation 1924/2006 , as amended by The Nutrition (Amendment etc.) (EU Exit) Regulations 2019 and The Nutrition (Amendment etc.) (EU Exit) Regulations 2020. As well as being authorised and recorded on the GB NHC Register, the claim must not be 'false, ambiguous or misleading'.

Some health claims about this product that relate to the treatment of cancer may also be in contravention of the Cancer Act 1939.

Claims range from generic statements about 'purifying' the body to more specific ones around cancer and autistic spectrum disorders.

Legal status of sodium chlorite

Sodium chlorite is not an authorised food additive in the UK. Advertising this product as suitable for this purpose contravenes assimilated Regulation 1333/2008, as amended by The Food Additives, Flavourings, Enzymes and Extraction Solvents (Amendment etc.) (EU Exit) Regulations 2019.

If the product is added, for example, to a glass of water to purify it, it would need to be listed as an authorised additive.

If it is intended to be consumed by drinking, the product may be classed as an ‘unsafe food’ as defined under assimilated Regulation 178/2002, as amended by The General Food Law (Amendment etc.) (EU Exit) Regulations 2019. Food business operators are obliged to remove unsafe food from the market. Food can still be classed as having been placed on the market if it is offered for free or in return for a donation. This is sometimes the case with sodium chlorite solutions such as MMS.

National Food Crime Unit activity

The NFCU takes steps to reduce the threat from and lessen the availability of, sodium chlorite solutions, particularly MMS.

Our activity has included:

- working with major online marketplaces
- co-ordinating local authority and partner responses to identified sellers in the UK
- submitting abuse complaints to take down websites
- sharing intelligence with international partners

If you identify sodium chlorite solutions for sale in any form we need you to report the matter to the NFCU or your local Trading Standards team as soon as possible.

Please contact us using this contact form.