

Form: TDS-001 Root Reference: M-1468

Effective date: 04.2025

TECHNICAL DATA SHEET

Natural Chelator

INFORMATION ON SUBSTANCE / MIXTURE

INCI	Phytic acid, Aqua
Description	Phytic Acid 50% solution is an aqueous solution of phytic acid (50%) Its strong chelating function allows Phytic Acid to remove or deactivate metal ions such as iron. Its metal chelating action remains high over a wide pH range. In addition, many valuable benefits have been reported
Chemical name	cis-1,2,3,5-trans-4,6-Cyclohexanehexol, 1,2,3,4,5,6-hexakis(dihydrogenphosphate)
Origin of raw material	Vegetable - Oryza sativa
Raw material category	Chelating agent

TECHNICAL DATA

Physical parameters

Appearance	Slight yellowish or brownish viscous liquid.
Solubility	Soluble in water
Molecular formula	C6H18O24P6
Molecular weight	660.0 g/mol
Compositional breakdown	Phytic Acid (50 %), Water (50 %)

Biological parameters

Total plate count	< 500 cfu/ml
Aerobic germs	< 100 cfu/ml
Pathogenic organisms	Absent. Microbial risk is low, considering the low pH values.

<u>Impurities</u>

Heavy metals (max. 20 ppm) and arsenic (max. 2 ppm) are part of the specification. Much lower levels are expected in practice. The product is subjected to a heavy metals test and yielded the following results: Arsenic (As): not detected (quantification limit 0.1 mg/kg)
Lead (Pb): not detected (quantification limit 0.05 mg/kg)



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	Cadmium (Cd): not detected (quantification limit 0.01 mg/kg)
Pesticides	Defatted rice bran, the starting material for above product, has been subjected to a pesticides analysis in the past. A large range of pesticides are tested, and are typically below 0.01 ppm (detection limit). Detection limit is dependent on the pesticide and range from $0.002-0.05$ ppm. Considering this, we expect the above product not to pose a specific concern with respect to pesticides.
Miscellaneous substances	The following substances are not expected/applicable based on product/process: 1,4-Dioxane Alkylphenols, Alkylphenol ethoxylates Amines, nitrosamines Ethylene oxide Formaldehyde or formaldehyde donors Glycol ethers Microplastics Palm oil, palm kernel oil, and its derivatives

TRANSPORT, STORAGE and SHELF LIFE

Storage conditions	Store in a cool and dry place, protected from light in tightly closed original container
Shelf Life	Min 24 months under good storage conditions

LEGISLATION

Suitability for cosmetics	This product is suitable to be used as ingredient in cosmetic products within the framework of the Cosmetics Regulation (EC) 1223/2009, it is in compliance with the Regulation in relation to ingredients. As with all ingredients, the use is subject to relevant (national) legislation.
Europe	Regulation (EC) 1223/2009 Annex listing: Not Annex-listed, not applicable, not required. None of the substances listed in Annexes II through VI of the Regulation (EC) 1223/2009 is intentionally present, nor considered prone to be present. The above product is in compliance with e.g. Article 17 of the aforementioned Regulation
BSE / TSE status	Animal origin is not involved, BSE / TSE is considered as not applicable to this product.
Genetically modified organisms (GMO)	Not derived from GMOs
ISO 16128 natural status	Natural / organic indices according to ISO 16128-1 and 16128-2:



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	natural content: 50 %, natural origin content 100 %
CMR substance	This ingredient is not classified as CMR according to Regulation (EC) 1272/2008. Legislative status is not concerned by CMRs
Allergens	Cosmetic allergens (no. 45, 67, 69–92 of Annex III of Regulation (EC) 1223/2009): Not expected to be present, based on theory. Atranol, chloroatranol, hydroxyisohexyl 3-cyclohexene carboxaldehyde (HICC, Lyral) and vetiveryl acetate are, taken into account the source, considered as not applicable to this product. Food allergens (Annex II, Regulation (EU) 1169/2011, i.e. cereals containing gluten, crustaceans, eggs, fish, peanuts, soybeans, milk, nuts, celery, mustard, sesame seeds, sulphur dioxide and sulphites, lupin, molluscs, and products thereof, as defined in the Annex): not expected / applicable based on product / process.
Nanomaterials	Material is a liquid, it is not a nanomaterial in accordance with the definition in Regulation (EC) 1223/2009. Please note that, considering the fact it is a liquid, particle size considerations are not applicable to this product.
Statement on animal testing	The manufacturer and supplier has not performed nor commissioned any animal test on above product. Upstream, tests have been done, last known test May 2004.
Product-specific approvals, at manufacturer	COSMOS approved, NATRUE approved, Halal certified, Kosher certified, ISO 9001, ISO 14001
Substances of Very High Concern (SVHC)	No ingredients are intentionally present appearing (at time of writing) on Annex XIV or on the Candidate List of Substances of Very High Concern for Authorisation in the framework of REACH (Regulation (EC) No 1907/2006). Furthermore, considering the nature of this product and the manufacturing process, the presence of an impurity appearing on the aforementioned Annex XIV or Candidate List is not expected in a concentration of 0.1 % or greater.
EC No.	201-506-6; 231-791-2
CAS No.	83-86-3;: 7732-18-5

DISCLAIMER

All warranty claims in respect to the conformity of our product are subject to our General Terms and Conditions of Sale and Delivery. The data listed above reflects the results of the manufacturer or our supplier quality tests. We do not hereby make any express or implied warranty, whether for specific properties or for fitness for any particular application or purpose. All values are valid for the product when dispatched from the works. We recommend you perform your own quality and or identification checks on receipt.