

SUITABILITY FOR FOOD CONTACT

In order to meet the hygiene and safety standards required by the industries of the agri-food sector, the Estalia Group markets EPOGLASS 69 series 0432, a certified, non-toxic and solvent-free vitrifying product with high chemical resistance, which has been specifically formulated to come into contact with different kind of food including acids, oils, fats and drinking water.

The product is suitable for food contact as it has passed the global and specific migration tests, carried out through the use of solvents to simulate the food itself, as established by the Ministerial Decree of 21st March

1973 (Hygienic discipline of packaging, containers, utensils intended to come into contact with food substances and substances of personal use), EU Regulation No. 10/2011, concerning contact with various types of food, and **Ministerial Decree no. 174 of 6th April 2004**, concerning contact with drinking water.

In order to choose the solvents to be used in the release tests to be carried out on materials intended for food contact, foods are conventionally divided into the following types, according to the provisions of the "Ordinary Supplement to the **Official Gazette n.104 of 20th April 1973**":

TYPE I: foods which may exert an extraction action comparable to that of an aqueous, acidic or non-acidic vehicle. Depending on the pH value of the food, a further subdivision is made:

TYPE I/a: if the food has a pH greater than 5

TYPE I/b: if the food has a pH equal to or less than 5

TYPE II: foods which may exert an extraction action comparable to that of an oily or greasy vehicle.

TYPE III: foods which may exert an extraction action comparable to that of an aqueous vehicle (acid or non-acidic) and that of an oily or fatty vehicle. The pH distinction indicated for the TYPE I food can be applied also for type III food.

TYPE IV: food that can exert an extraction action comparable to that of an alcoholic vehicle. Foods with an alcohol content of 5% or more are included in this type. The pH distinction indicated for the TYPE I food can be applied also for type IV food.

TYPE V: food which, by virtue of its physical state, shape and consistency, causes discontinuous contact and can't cause a significant extraction action.

ESTALIA Performance Coatings SpA

Sede legale/Amministrativa Via Giacomo Matteotti 160 - 25014 - Castenedolo - Brescia - Italy

Sede Operativa Via San Rocco, 10/1/A, 42027, Montecchio Emilia (RE) **Contatti:** Tel. +39 0522 11709- Fax +39 0522 865796

Partita IVA/C.F. IT03432100174 del 1/12/1997 · *R.E.A. n.* BS - 396070 · *Capitale Sociale* € 6.000.000

Contatti Tel. +39 030 21 35 55 - Fax +39 030 27 31 664 · *Web* www.color-damiani.com - www.estaliacoatings.com

Soggetta a direzione e coordinamento da parte di CIBINO S.r.l. C.F. 01746420981 ai sensi dell'articolo 2497-bis del C.C.

THE TABLE SHOWS IN DETAIL THE FOODS CLASSIFICATION FOR TYPE:

FOOD TYPE I	<u>1. WATER AND DERIVATIVES</u> Water, ice, ice-lolly.
	<u>2. LIQUID FOOD</u> Beverage and vegetable infusion, such as those made with coffee, tea, chamomile and similar products. Beer containing less than 5% of ethanol, musts and wort, cider syrups containing less than 5% of ethanol, fruit juices or fruit concentrates, whole milk and skimmed milk, other carbonated or non-carbonated beverages containing less than 5% ethanol.
	<u>3. FRUIT AND OTHER VEGETABLE DERIVATIVES</u> Fruit in syrup, candied fruit, jams and fruit marmalades, fruit mustard, citrus paste, peeled tomatoes and tomato concentrates, fruit ice-cream, molasses, vinegar and pickles, vegetables preserved in aqueous mixture, vegetables preserved in salt solution, other vegetable preserves and semi-preserves (excluding those with oil or containing fatty seasonings or with alcohol).
	<u>4. MEAT AND EGGS</u> Fresh meat of all zoological species, including birds and game, salted, smoked, frozen or otherwise preserved meat, hard-boiled, unshelled eggs and frozen, unshelled eggs.
	<u>5. MISCELLANEOUS</u> oney, nougat, chocolate and similar products, soaked cod fish and cod fish fillets, dairy products in aqueous liquid, soured milk and milk in associations with fruit and fruit derivatives.
FOOD TYPE II	<u>1. OILS AND FATS</u> Olive and seed oil, butter, margarine and hydrogenated fats, essential oils, other animal and vegetable oils and fats.
	<u>2. DAIRY PRODUCTS</u> Soft cheese (excluding those in aqueous liquid), semi-hard and hard cheese
	<u>3. FOOD CONTAINING FREE OIL OR FAT</u> Canned food or vegetable conserved food in oil or otherwise fried.
FOOD TYPE III	<u>1. MEAT FOOD</u> Ham and similar products, fresh, cured, cooked, smoked and canned meat, meat pie and other preserved meat.
	<u>2. FISH AND DERIVATIVES</u> Fresh fish, fresh and preserved mollusks/crustaceans, other preserved and semi-preserved fish, salted fish (excluding dried fish), smoked, cooked, frozen or otherwise preserved fish.
	<u>3. MILK DERIVATIVES</u> Condensed milk, evaporated milk, pudding, milk cream, cream, custard, crème patissière.
	<u>4. MISCELLANEOUS</u> Mayonnaise, Russian salad, ice-cream (other than fruit ice-cream), homogenised foods, emulsified oils and fats, ready-made condiments, mixed animal and vegetable preserves, stock cubes, dried soups, canapés and sandwiches containing foods listed in types I, II, and III. Fresh sweet pastry, containing cream, jam, marmalade, fruit in syrup, chocolate and derivatives and chocolate substitutes.
FOOD TYPE IV	<u>1. ALCOHOL</u> and special wines (excluding those containing less than 5 per cent of ethanol), wine containing 5 per cent or more of ethanol, liqueurs, spirits, ethanol, beer containing 5 per cent or more of ethanol, ciders containing 5 per cent or more of ethanol, other beverages containing 5 per cent or more of ethanol.
	<u>2. FOOD PRESERVED IN ALCOHOLIC MEDIUM</u>
FOOD TYPE V	<u>1. CEREALS AND DERIVATIVES</u> Cereals, flours, starches, pasta, popcorn, corn-flakes and similar products, roasted barley in grain and powder, ravioli, potato dumplings and similar products.
	<u>2. BAKERY FOOD</u> Bread, breadsticks, crackers, biscuits, other bakery food (panettone, sweet bread and similar products).
	<u>3. FRUIT, VEGETABLES AND DERIVATIVES</u> Fresh, dried and frozen vegetables and fruits, fresh and dried mushrooms, truffles.
	<u>4. MISCELLANEOUS</u>

ESTALIA Performance Coatings SpA

Sede legale/Amministrativa Via Giacomo Matteotti 160 - 25014 - Castenedolo - Brescia - Italy

Sede Operativa Via San Rocco, 10/1/A, 42027, Montecchio Emilia (RE) **Contatti:** Tel. +39 0522 11709- Fax +39 0522 865796

Partita IVA/C.F. IT03432100174 del 1/12/1997 · *R.E.A. n.* BS - 396070 · *Capitale Sociale* € 6.000.000

Contatti Tel. +39 030 21 35 55 - Fax +39 030 27 31 664 · *Web* www.color-damiani.com - www.estaliacoatings.com

Soggetta a direzione e coordinamento da parte di CIBINO S.r.l. C.F. 01746420981 ai sensi dell'articolo 2497-bis del C.C.

Powder milk, milky flour, table water powders, egg powder, dried yeast, rennet, sugar, sweets, sugared almond, edible salt, dried fish, coffee beans and powder coffee, cocoa powder, spices (cloves, cinnamon, nutmeg, saffron, oregano, pepper and similar products), aromatic and medicinal herbs (chamomile, mallow, mint, tea, linden and similar products), other food in grains and powder.

Epoglass 69 is used in the following fields:

- Dairy industry (milking parlours, milk processing rooms, dairies) Beverage industry (distillation environments)
- Meat processing industry (breeding farms, slaughterhouses, delicatessen, charcuterie) Fruit and vegetable processing industry (canning)
- Pharmaceutical industry
- Pasta manufacturing plant
- Kitchens of restaurants, canteens, laboratories, processing and conservation departments
- Installations for the collection, treatment, supply and distribution of water intended for human consumption

Thanks to its washability and detergency features, the product can be used for the vitrification of tanks, concrete and metal wells for the containment of food liquids, hydrocarbons and drinking water, for painting indoor floors of garages, kitchens and food industries, and for inner surfaces of containment tanks for industrial, civil and sewage wastewater with weakly acidic or weakly basic pH.

The results of the tests to which Epoglass 69 has been subjected are the following:

TEST REPORT No 887/22/P Global Migration and No 888/22/P Specific Migration

Simulant: DISTILLED WATER

The material under the tested conditions is suitable for contact with water intended for human consumption.

TEST REPORT No 901/22/P Global Migration and No 886/22/P Specific Migration

Simulant: DISTILLED WATER

The material under the tested conditions is suitable for short time contact with food of TYPE I/a of aqueous non-acidic (pH>5) nature.

TEST REPORT No 59/22/P Global Migration and No 469/22/P Specific Migration

Simulant: ACETIC ACID 3%

The material under the tested conditions is suitable for short time contact with TYPE I/b food of aqueous and/or acid nature (pH<5).

TEST REPORT NO. 884/22/P for global migration and No. 885/22/P for specific migration

Simulant: OLIVE OIL

The material under the tested conditions is suitable for short time contact at room temperature with oily and/or greasy TYPE II foods.

The tests with the various simulants were performed after one month from the application of the paint products, in compliance with the procedure reported in the reference legislation; for such reason, the conditions of use must comply with the times, also respecting the temperatures and thicknesses provided in our technical data sheets. The test reports issued by the Stazione Sperimentale per l'Industria delle Conserve Alimentari (SSICA) are available on request.

ESTALIA Performance Coatings SpA

Sede legale/Amministrativa Via Giacomo Matteotti 160 - 25014 - Castenedolo - Brescia - Italy

Sede Operativa Via San Rocco, 10/1/A, 42027, Montecchio Emilia (RE) **Contatti:** Tel. +39 0522 11709- Fax +39 0522 865796

Partita IVA/C.F. IT03432100174 del 1/12/1997 · **R.E.A. n. BS - 396070 · Capitale Sociale** € 6.000.000

Contatti Tel. +39 030 21 35 55 - Fax +39 030 27 31 664 · **Web** www.color-damiani.com - www.estaliacoatings.com

Soggetta a direzione e coordinamento da parte di CIBINO S.r.l. C.F. 01746420981 ai sensi dell'articolo 2497-bis del C.C.