

Tixosil for Food Ingredients

Tixosil® is a range of synthetic precipitated amorphous silica that improves the anti-caking and freeflow properties of powders, making them easier to manipulate, transport and use. The high absorption power and anti-caking properties of Tixosil® makes it ideal for use in a variety of food applications.

PROBLEMS ASSOCIATED w/ ANTI-CAKING

Particles have a tendency to stick to one another due to chemical attraction caused by excess moisture.

Without use of an anti-caking agent, products can:

- Clump together
- Become difficult to manage while flowing through equipment
- Result in wasted product & inefficiencies throughout production, packaging, & storage

HOW SILICA HELPS

Silica, a fine powder that covers the surface of host powders, creates surface traction between particles that prevents them from clumping together, enabling particles to flow freely.

Further, because silica is hydrophilic, it:

- Contains moisture-absorbing properties that keep particles consistently dry & easy to manage, extending shelf life
- Allows for faster processing due to more accurate weighing on scales
- Elimination of blockage throughout equipment
- Systematic machine handling & storage processes

RECOMMENDED GRADES

	Tixosil® 68B FCC	Tixosil® 68B PC	Tixosil® 38A	Tixosil® 43B	Tixosil® 333	Tixosil® 365
Product Description	Food grade material - meets FCC monograph	Personal Care grade - meets stringent microbial requirements for dietary applications	Medium particle size, commonly used in food applications	Smaller particle size, high oil absorption	Fine, milled version of milled T43B- with high oil absorption	Fine particle size applications, also used in CASE
Particle Size (D50)	Small (16 microns)	Small (16 microns)	Medium (60 microns)	Small (16 microns)	Small (<10 microns)	Very Small (<5 microns)
Oil Absorption	Medium	Medium	Medium	High	High	High
Manufacturing Location	US	US	France/Brazil	Brazil	Brazil	France

COMMON APPLICATIONS

- | | | | |
|-------------------------|-------------------|----------------------|-----------------|
| • Artificial Sweeteners | • Essential Oils | • Non-dairy Creamers | • Soup Mixes |
| • Bake Mixes | • Flavors | • Powdered Eggs | • Soya Lecithin |
| • Baking Powders | • Grated Cheeses | • Powdered Milk | • Spices |
| • Chili Powders | • Gravy Mixes | • Salt | • Stabilizers |
| • Cocoa Mixes | • Instant Coffee | • Salt Substitutes | • Whey Products |
| • Desert Mixes | • Meat Seasonings | • Seasonings | • Etc... |

Solvay Silica's production sites follow strict manufacturing guidelines, meeting stringent industrial quality standards, including: GFSI, HACCP, ISO 9001, ISO 14001, Kosher, and Halal certifications

DATA SHEET N°: 2000 Version 6 date: January 2014**N° CAS: 112 926-00-8 (previously: 7631-86-9)****N° EINECS: 231-545-4****Kosher Certified
ISO 9001 Registered****Halal Certified
ISO 14001 Registered****IDENTITY AND ASPECT**

Chemical composition:	10 SiO ₂ , 1 H ₂ O
Characteristics:	Amorphous precipitated silica
Aspect:	White powder

PRODUCT SPECIFICATIONS

Parameter	Method	Limits	Unit
pH (5% Solution)	LAB-1543	6.0 – 7.3	pH Units
Loss on Drying (2hrs @ 105°C)	LAB-1530	≤8.0	%
Loss on Ignition @ 1000°C	LAB-1530	≤12.5	%
Soluble Salts (as Na ₂ SO ₄)	LAB-1541	≤4.0	%
Median Particle Size D ₅₀	LAB-1536	15-22	µm

Corresponding specification values are mentioned on the certificate of analysis

Undesirable substances: in accordance with Feed / Food European Regulation (2002/32/EC) including its updated versions and amendments.

PACKAGING

Standard packaging:

- 12.5 kg paper bags
- Bulk

SAFETY, STORAGE, HANDLING, LABELLING, TRANSPORTATION, REGULATION

- Period of Validity = 1 year from the date of manufacture, if stored in a cool, dry place.
- For transportation, packaging and safety instructions, please see our MSDS

Our Technical Services Department takes all the necessary measures to guarantee that the product conforms to the specifications indicated in this document. The user is nevertheless advised to carry out the preliminary tests to ensure the suitability of the product.

The user is advised in all cases to check local legislation concerning the use of the product.

We remain at your entire disposal to provide any further information that you may require.

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