



## PRODUCT INFORMATION

# CATALYST S-23™

## CATALYST S-23™

### High-Performance, High-Quality Catalyst for PET Synthesis

- Consistent, high purity catalyst.
- Non-dusting catalyst, process-friendly.

### Characteristics

Formula	Sb <sub>2</sub> O <sub>3</sub>
Appearance	White crystalline powder
Specific Gravity	5.0-5.3
Melting point	652°C
CAS No.	1309-64-4

### Typical Analysis

% Antimony oxide (on dry basis)	99.9 min
Pb (ppm)	<100
Fe (ppm)	<10
As (ppm)	<100
Transmittance in MEG(2-wt%)	>97.5
Average particle size (microns)	0.4~0.8
%MEG	3.0

### Benefits Summary

- Catalyst S-23™ is a low trace metal, high purity catalyst used in the manufacture of PET.
- Catalyst S-23™ has excellent solubility in ethylene glycol and dissolves to produce a clear solution.
- Catalyst S-23™ in the PET process produces polyester resin and fiber with good color control.

### Recommendations for use

- Catalyst S-23™ is soluble in ethylene glycol at 160°C.
- Catalyst S-23™ can be added directly into the PTA slurry or at the polycondensation stage of the process.
- As practiced with all antimony catalysts, do not add phosphorous-containing antioxidants concurrently with Catalyst S-23™, The presence of organophosphorous compounds can reduce antimony (III) to antimony metal. This will reduce both the effectiveness of the catalyst and create grayness in the polymer. Ideally, the phosphorous antioxidants are not required and should not be used.
- Catalyst concentration varies according to end use of the polymer. A typical recommendation would be 160-250 ppm as antimony based on total weight of PET.



## Packaging

Catalyst S-23™ is provided in 25 KG multi-walled paper bags.

## Environmental information

In the case of spill or release, stop the leak, if possible. Ventilate the space involved. Absorb, sweep up, and place in container for disposal. Shut off or remove all ignition sources. Prevent waterway contamination. Protect workers with water spray. Collect run-off water and transfer to drums for disposal. Avoid creating a dusty atmosphere.

## Safety and Industrial Hygiene

Contact with Catalyst S-23™ may cause eye irritation. Prolonged or repeated contact may dry skin and cause irritation. Contains antimony, which causes lung, heart, liver, kidney, and spleen damage if swallowed. Do not get in eyes, on skin or on clothing. Avoid breathing dust, and wash thoroughly after handling. Protective clothing and goggles are recommended to prevent eye and skin irritation. Use only with adequate ventilation. Avoid creating dust in handling, transfer or clean-up. Workers should be provided with a NIOSH-approved respirator if ventilation is inadequate.

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See MSDS for Health & Safety Considerations

## Suggested First Aid

If product comes in contact with eyes or skin, immediately flush with water for at least 15 minutes, while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.

If product is inhaled, remove individual to fresh air. If breathing is difficult, get medical attention.

If product is swallowed, induce vomiting as directed by medical personnel. Get medical attention immediately. Never give anything by mouth to an unconscious person.