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Agosi AG is part of Umicore, Brussels, a global materials technology group. It focuses on application areas where its expertise in materials science, chemistry and metallurgy makes a real difference. Umicore's overriding goal of sustainable value creation is based on an ambition to develop, produce and recycle materials in a way that fulfils its mission: materials for a better life. Its social commitment and innovative environmental approach have earned Umicore worldwide recognition; the corporation is among „World's Most Ethical Companies“ (Ethisphere 2012). www.umicore.com

With its subsidiaries in Austria and Thailand, North- and South America, Agosi represents the core of the Umicore Business Unit Jewelry & Industrial Metals. It provides a closed-loop concept of precious metals services, products and refining for the precious metals consuming industries. Its Pforzheim site is RJC-CoC certified and can offer responsibly produced CoC-products. Agosi is also accredited according to the Responsible Gold and Responsible Silver Guidance by the London Bullion Market Association (LBMA). Certificates are available online www.agosi.de

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Precious Metals and Chemistry

Silver crystals and silver gauzes

Your Partner for Precious Metals

For over a century, Agosi has specialised in the recovery of precious metals and in manufacturing precious metal products. Especially for its customers in the chemical industries, Agosi can offer high-quality silver crystals and silver gauzes.

Silver catalysts for formaldehyde production

Consequent material and process improvement in the field of silver catalyst (purity $\geq 99.99\%$) have resulted in a high quality standard with an outstanding economic efficiency. Best test results regarding purity, surface structure, bulk density and durability attest to the customised process improvements for formaldehyde production that Agosi has achieved.

With its own refining facilities, Agosi can offer the entire precious metal cycle and thus make used silver catalyst directly available for the customer again. Agosi is certified according to DIN EN ISO 9001, 14001, and as a specialist reprocessing company.

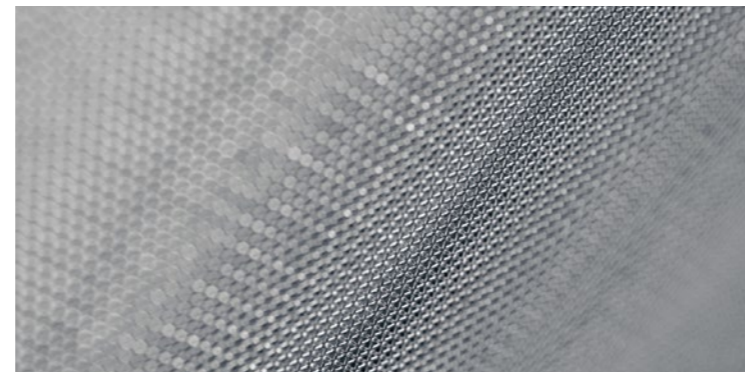
Your benefits:

- » spherical shape \rightarrow high mechanical strength, hence longer lifetime of the catalyst
- » light bulk density \rightarrow longer bed life (up to 12 months), low pressure drop
- » large surface area ($\geq 80 \text{ mm}^2/\text{g}$) \rightarrow high methanol conversion into formaldehyde, few side products, better yield
- » high purity (silver catalyst $\geq 99.99\%$)

Hightech products

Silver crystals and silver gauzes are used as catalysts in the chemical reactions of methanol to formaldehyde. By continuously optimizing the physical properties of silver catalysts we supply our customers with innovative products whose technological development guarantees a high level of efficiency. Silver crystals with low bulk density and different grain sizes as well as silver gauzes with various mesh widths and wire diameters complete our range of products and ensure that we meet the specific needs of each individual application.

Both partners, Agosi and its Austrian subsidiary Ögussa, are specialised in the production of catalysts: while Ögussa produces silver gauzes corresponding to customer requirements, Agosi supplies silver crystals in various grain sizes and structures.



Precious Metal Refining

At the end of the silver catalyst's life, the precious metal bearing material enters Agosi's refining facilities. Refining and regeneration into high-quality products are a full service package. Thus Agosi completes the closed loop of precious metals and ensures their efficient use and economical re-use for their application in the chemical industries. Our clients are offered reliability, quality and competent technical application services in all the questions on precious metal products and recycling, as well as on logistics and technological and innovative support.



Technical Data

AgosiSilverCatalyst

chem. specification	standard grain sizes		bulk density g/l	service
	DIN ISO 3310 mm	mesh ASTM E11		
Ag $\geq 99.99\%$				recycling of used silver catalyst
≤ 100 ppm	0.35 - 0.15	-45 + 100	≤ 3200	
Au ≤ 10 ppm	0.50 - 0.35	-35 + 45	≤ 2800	
Pd ≤ 10 ppm	1.00 - 0.50	-18 + 35	≤ 2100	
Pt ≤ 10 ppm	2.00 - 1.00	-10 + 18	≤ 1800	
Cu ≤ 25 ppm	2.00 - 0.50	-10 + 35	≤ 2100	
Ni ≤ 5 ppm				
Pb ≤ 5 ppm				
Cr ≤ 5 ppm				
Fe ≤ 5 ppm				
Mn ≤ 5 ppm				
Al ≤ 5 ppm				
S ≤ 10 ppm				
Cd ≤ 5 ppm				
Further grain sizes on request.				

AgosiSilverGauzes

specification	product	service
mesh/cm ²	64	further mesh widths and wire diameters as well as alloy compositions on request
wire- ϕ	0.35mm	
weight	ca. 1650g/m ²	rectangular: breadth and length according to customer specification round: diameter according to customer specification
fine silver	99.99%	
		precious metal refining

