

ARMEX® Blast Media Composite Formula Product Code 69001 and 69041 20015521, 20015524 NSN# 5350-01-364-5012

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ARMEX® Blast Media Composite Formula is specially formulated for use with baking soda based delivery devices and micro-blasting equipment. The media is based on sodium bicarbonate (baking soda) which is a natural, water soluble, inorganic compound with a soft crystalline structure that makes it an ideal, cleaning agent. Composite Formula Media is specifically designed to remove coatings and residues from sensitive substrates.

Key Features and Benefits

- Optimized crystal size allows coating removal without damage to sensitive substrates.
- Free flowing qualities reduce flow problems associated with other baking soda-based blast medias assuring a consistent cleaning of your anilox rolls.
- Water soluble eliminates media residue concerns; simplifies clean-up & disposal; less solid waste generated.
- Safe to use on virtually any substrate, including delicate surfaces, rotating equipment & moving parts.
- Nontoxic & nonhazardous as defined by EPA & OSHA.
- Contains no free silica, and is nonflammable resulting in significant worker safety advantages
- Contains no solvents or caustic chemicals reduced air pollution.
- USDA-approved as an A-1 cleaner and suitable for use in FDA-regulated facilities.
 - * Will not cause thermal sparks when striking the workpiece. Equipment must be grounded and bonded to prevent electrostatic discharge.

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Information on Ingredients

- The media contains sodium bicarbonate that meets USP (United States Pharmacopoeia) standards and typically has less than 50 ppm each of chloride & sulfate ions.
- The media contains a hydrophobic flow aid that has a surface area greater than 80 m²/ gm for greatly improved flow properties.

Particle Size

The media has an optimized particle size distribution as follows:

- Retained on 140 mesh sieve (106 microns): 7% max.
- Retained on 200 mesh sieve (75 microns): 45% max.
- Retained on 325 mesh sieve (45 microns): 80% min.
- Retained on 400 mesh sieve (38 microns): 90% min.

Flow Characteristics

Flow characteristics of the media were determined using a Hosokawa Powder Tester and results are summarized in the table below. Any media that has a total flowability index of more than 80 is considered to have very good flow properties.

Type of Test (Max. Score)	Flowability Index (Typical Values)
Angle of Repose (25)	18
Compressibility (25)	23
Angle of Spatula (25)	21-22
Uniformity (25)	23-24
Total (100)	85-87

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Corrosion Data

Aluminum and carbon steel coupons were immersion tested in saturated solutions at 120 F for 14 days. Corrosion rates of the media were found to be significantly lower than those of distilled water.

Immersion Corrosion Rate			
Product	(mils/yr.) AL-7075	AL-5050	CS-1020
Distilled Water	1.15	1.11	9.0
ARMEX® Blast Media	0.25	0.20	0.17

Typical Operating Conditions

The media is specially formulated for use with the soda blasting delivery devices. Typical operating conditions are summarized as follows:

Air Pressure:	10-100 psi
Air Volume:	31-407 cfm
Media Flow Rate:	0.25-2.00 lbs/min.
Water Flow Rate:	0.0 - 0.25 gal/min.

The **Air Pressure** used is the blasting pressure. On delicate substrates, such as composites, lower pressures will be more usual (pressures 50psi and lower). This will be dependent on how delicate the substrate is and what is being removed.

The **Air Volume** is the amount of air required to maintain the blasting pressure. This is dependent on the size of the nozzle. The larger the nozzle and the higher the pressure, the more air volume required to sustain that blasting air pressure.

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Media Flow Rate is the rate that the ARMEX® Blast Media is consumed during blasting operations. Depending on the substrate, 0.25 lbs up to 2.00 per minute will be used.

Water Flow Rate is the amount of water used during blasting. Most of the time water will be used as a dust suppressant, and the ARMEX® Performance Nozzle is designed to use only about 0.25 gal/min for this purpose.

Packaging

The media is packaged in 50-lb and 25-kg multi-walled bags.

<u>Safety</u>

ARMEX® Blast Media has an excellent health and safety profile. It presents minimal risk to workers from either short term acute exposure or long term (chronic or subchronic) exposure. Please refer to MSDS for details.

Testing and Approval

- USDA approved as A-1 cleaner
- Suitable for use in FDA-regulated facilities
- ISO 9002 certified

General Properties

Appearance......White crystalline powder

Bulk Density..... 60 lbs/ft² (1 g/cc)

Taste.....Slightly alkaline

Specific Gravity.....2.2

Solubility in Water......See Figure 1

Solubility in Alcohol....Insoluble

pH (8% solution)..... 8.2

Mohs Hardness.....2.5

For additional information, please call 1-800-332-5424.

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