



Atlas Minerals & Chemicals, Inc.



DATA SHEET

8-57PI (1-98²)
Supersedes 8-57PI (1-93)

REZKLAD[®] MACHINERY ADHESIVE

DESCRIPTION

REZKLAD MACHINERY ADHESIVE is a solvent free resinous bond coat for adhering equipment bases or metal plates to concrete, masonry brick or tile substrates.

TYPICAL USES

REZKLAD MACHINERY ADHESIVE is formulated for bonding equipment base plates to floor substrates.

REZKLAD MACHINERY ADHESIVE is recommended for use in areas subjected to heavy traffic, shear stresses, impact and abrasion. The floor system is ideal for use in steel mills, foundries, machine shops and pulp and paper, food and beverage facilities in areas subjected to severe physical abuse.

REZKLAD MACHINERY ADHESIVE LT is a special formulation for installations when the substrate and ambient temperatures are between 34°F (1°C) and 60°F (16°C). It is also a rapid setting system when temperatures are between 60°F (16°C) and 70°F (21°C). For the food processing and beverage industries, REZKLAD MACHINERY ADHESIVE and REZKLAD MACHINERY ADHESIVE LT are certifiable for use in USDA inspected facilities.

CHEMICAL RESISTANCE

REZKLAD MACHINERY ADHESIVE and REZKLAD MACHINERY ADHESIVE LT are resistant to dilute acids, alkalies and salts.

PACKAGING

REZKLAD MACHINERY ADHESIVE

36 lb. 15 oz. (16.8 kg) Unit Consisting of:

- One - 1-gal. can of Resin (6 lb. [2.7 kg.]
- One - 1-gal. can of Hardener (5 lb. 2 oz. [2.3 kg.]
- One - bag of Powder (25 lb. 13 oz. [11.7 kg.]

REZKLAD MACHINERY ADHESIVE LT

27 lb. 15 oz. (12.7 kg) Unit Consisting of:

- One - 1-gal. can of Resin (6 lb. [2.7 kg.]
- One - 1/2-gal. can of LT Hardener (3 lb. [1.4 kg.]
- One - bag of Powder (18 lb. 15 oz. [8.6 kg.]

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUE
Density	ASTM C905	97.3 lb./cu. ft. (1.56 g./cc.)
Bond Strength, 14 days @ 77°F (25°C)	ASTM C321	1,200 psi. (8.27 MPa)
Tensile Strength, 7 days @ 77°F (25°C)	ASTM C307	2,000 psi. (13.8 MPa)
Compressive Strength, 7 days @ 77°F (25°C)	ASTM C579	11,000 psi. (75.8 MPa)
Coefficient of Thermal Exp., in./in./°F (cm./cm./°C)	ASTM C531	2.1 x 10 ⁻⁵ (1.2 x 10 ⁻⁵)
Water Absorption	ASTM C413	0.3%
Temperature Resistance Continual	—	120°F (49°C)
Intermittent	—	150°F (66°C)
Linear Shrinkage	ASTM C531	0.3%

ESTIMATING OF THE REZKLAD MACHINERY ADHESIVE / REZKLAD MACHINERY ADHESIVE LT

Thickness	36 lb. 15 oz. (16.8 kg.)	27 lb. 15 oz. (12.7 kg.)
1/16"	72 sq. ft.	55 sq. ft.
1/8"	36 sq. ft.	27 sq. ft.
3/16"	24 sq. ft.	18 sq. ft.
1/4"	18 sq. ft.	13 sq. ft.

SURFACE PREPARATION

REZKLAD MACHINERY ADHESIVE can be applied to concrete, ferrous metal, aluminum, masonry brick and tile surfaces. The substrate must be structurally sound, clean, dry and free of all contaminants such as sealers, curing compounds, coatings, oil, dirt, dust and water. Previously applied coatings or paint must be removed.

Concrete: Finished concrete must be free of ridges, protrusions, fins, mortar splatter and have a tight laitance-free steel trowel finish. Abrasive grit blasting or acid washing are recommended surface preparation methods. A finish similar to the profile of 100 to 120 grit sandpaper is suggested.

Metals: Metal surfaces should be grit blasted to a NACE #1 white metal blast cleaned surface finish. When grit blasting is not practical, clean by wire brushing or with abrasive paper and wash with degreasing solvent such as xylene.

For additional information, refer to Surface Preparation, Data Sheet PS-30.

NOTE: ATLAS makes it a practice to continuously update and enhance our CCM (Corrosion Resistant Construction Materials) products. For the most recent version of any Data Sheet, please visit our Web site at www.atlasmin.com.

TEMPERATURE DURING APPLICATION

Store REZKLAD MACHINERY ADHESIVE and REZKLAD MACHINERY ADHESIVE LT at 70°F (21°C) to 80°F (27°C) for 24 hours prior to use. The best working characteristics of the materials will be attained when the temperature of the substrate, air and REZKLAD MACHINERY ADHESIVE and REZKLAD MACHINERY ADHESIVE LT are between 60°F (16°C) and 85°F (29°C).

For REZKLAD MACHINERY ADHESIVE, the minimum installation temperature is 60°F (16°C). For REZKLAD MACHINERY ADHESIVE LT, the minimum installation temperature is 34°F (1°C).

MIXING OF THE REZKLAD MACHINERY ADHESIVE

Mixing of the components should be with a KOL type mixer with a 5-gallon capacity. The mixing speed should be between 60 and 75 RPM.

36 lb. 15 oz. (16.8 kg) Unit

- Combine the contents of the 1-gallon can (6 lb. [2.7 kg.]) of REZKLAD MACHINERY ADHESIVE Resin with the one gallon can (5 lb. 2 oz. [2.3 kg.]) of REZKLAD MACHINERY ADHESIVE Hardener in the 5-gallon capacity mechanical mixer. Mix thoroughly for approximately two minutes.
- Slowly add the 25 lb. 13 oz. (11.7 kg.) bag of REZKLAD MACHINERY ADHESIVE Powder.
- Mix the combined components for approximately two minutes or until all the powder is thoroughly dispersed.

27 lb. 15 oz. (12.7 kg.) LT Unit

Mix the components of REZKLAD MACHINERY ADHESIVE LT in an area where the temperature is between 65°F (18°C) and 75°F (24°C).

- Combine the contents of the 1-gallon can (6 lb. [2.7 kg.]) of REZKLAD MACHINERY ADHESIVE Resin with the 1/2-gallon can (3 lb. [1.4 kg.]) of REZKLAD MACHINERY ADHESIVE LT Hardener in the 5-gallon capacity mechanical mixer. Mix thoroughly for approximately two minutes.
- Slowly add the 18 lb. 15 oz. (8.6 kg.) bag of REZKLAD MACHINERY ADHESIVE Powder.
- Mix the combined components for approximately two minutes or until all the powder is thoroughly dispersed.

Note: The amount of the powder may be varied slightly to obtain the desired consistency. Please note that decreasing the powder component will decrease the estimated unit coverage.

MIX RATIO CHART – REZKLAD MACHINERY ADHESIVE

REZKLAD MACHINERY ADHESIVE	Weight	Volume
Rezklad Machinery Adhesive Resin	6 lb. (2.7 kg.)	81 fl. oz. (2.40 liters)
Rezklad Machinery Adhesive Hardener	5 lb. 2 oz. (2.3 kg.)	81 fl. oz. (2.40 liters)
Rezklad Machinery Adhesive Powder	25 lb. 13 oz. (16.8 kg.)	25 lb. 13 oz. (11.7 kg.) bag
Batch Size	36 lb. 15 oz. (14.3 kg.)	0.38 cu. ft. (10.8 liters)

APPLICATION OF THE REZKLAD MACHINERY ADHESIVE**Steel Base Plates**

- Apply duct tape or masking tape on the substrate in the shape of the base plate leaving 1/4" (6.4 mm.) to 1/2" (12.7 mm.) to space on all sides.
- Apply a minimum 1/16" (1.6 mm.) thickness of the REZKLAD MACHINERY ADHESIVE with a 3/16" V-notched trowel to the substrate.
- Position and set the base plate by applying pressure and slightly rotating the plate into the final position.
- Square or taper perimeter edges with a margin trowel.
- Total application thickness can be as great as 1/4" (6.4 mm.) to compensate for irregularities of the substrate and base plate. For cross sections greater than 1/4" (6.4 mm.) refer to REZKLAD MACHINERY GROUT, Data Sheet 8-59PI.

Metal Plate Floors

Plates must be sheared in the same direction so that all edges are clean and square with no warpage in the plate. Convenient plate sizes are 12" x 12" to 15" x 15". Oil or grease must be removed with a suitable solvent before abrasive grit blasting. Backs of the plates must be abrasive grit blasted to a NACE #1 white metal blast cleaned surface finish. Plates must be kept clean and dry.

- Apply a minimum 1/4" (6.4 mm.) thickness of the REZKLAD MACHINERY ADHESIVE with a 3/16" V-notched trowel to the substrate. **DO NOT** apply more REZKLAD MACHINERY ADHESIVE than can be covered in 30 to 40 minutes at 75°F (24°C) with the steel plates.
- Lay the plates and press into place. Use a short sliding motion to push up a thin bead of REZKLAD MACHINERY ADHESIVE between the plates and joint lines.
- For irregular concrete or metal surfaces, it may be desirable to place weight on the plates until an initial set has taken place.

REMOVING BASE PLATES BONDED WITH THE REZKLAD MACHINERY ADHESIVE

Heating the base plate to 200°F (93°C) to 400°F (186°C) will allow the base plate to be removed from the substrate.

MIX RATIO CHART – REZKLAD MACHINERY ADHESIVE LT

REZKLAD MACHINERY ADHESIVE LT	Weight	Volume
Rezklad Machinery Adhesive Resin	6 lb. (2.7 kg.)	81 fl. oz. (2.40 liters)
Rezklad Machinery Adhesive LT Hardener	3 lb. (1.4 kg.)	46 fl. oz. (1.36 liters)
Rezklad Machinery Adhesive Powder	18 lb. 15 oz. (18.6 kg.)	18 lb. 15 oz. (18.6 kg.) bag
Batch Size	27 lb. 15 oz. (12.7 kg.)	0.29 cu. ft. (8.2 liters)

TYPICAL WORKING & SERVICE TIME OF THE REZKLAD MACHINERY ADHESIVE

Temperature	Working Time	Service Time
60°F (16°C)	70 minutes	24 hours
75°F (24°C)	60 minutes	16 hours
85°F (29°C)	40 minutes	12 hours

TYPICAL WORKING & SERVICE TIME OF THE REZKLAD MACHINERY ADHESIVE LT

Temperature	Working Time	Service Time
34°F (1°C)	40 minutes	24 hours
40°F (4°C)	30 minutes	20 hours
50°F (10°C)	25 minutes	16 hours
60°F (16°C)	20 minutes	12 hours
75°F (24°C)	15 minutes	6 hours

CLEANING OF TOOLS AND EQUIPMENT

Steel wool, soap and warm water will remove the materials referred to in this Data Sheet from mixing tools and equipment if cleaning is done immediately after use. Solvents, such as methyl ethyl ketone, toluene or xylene, will have to be used after the material has begun to harden. Fully hardened material will have to be removed by mechanical means.

Dispose of residues and wastes in accordance with the directions in the Safety Data Sheets and government regulations.

STORAGE AND SHELF LIFE

Store all materials in a cool, dry environment. Keep all materials out of direct sunlight. Ideal storage temperature is 75°F (24°C). Protect from freezing. In unopened original containers, the materials referred to in this Data Sheet have a shelf life of approximately one year.

PRODUCT SPECIFICATION

The system shall be REZKLAD MACHINERY ADHESIVE and REZKLAD MACHINERY ADHESIVE LT as manufactured by Atlas Minerals & Chemicals, Inc. and the adhesive shall be certifiable for use in USDA inspected facilities.

PRECAUTIONS

The materials referred to in this Data Sheet are for Industrial Use Only. They contain materials that present handling and potential health hazards. Consult Safety Data Sheets and the container labels for complete precautionary information.

TECHNICAL SERVICES

ATLAS maintains a staff of Technical Service Representatives who are available to assist you with the use of ATLAS products. In the event of difficulties with the application of ATLAS materials, the installation should be stopped immediately and ATLAS' Technical Service Department consulted for assistance.

WARRANTY

ATLAS warrants that its products will be free from defects in workmanship and materials under normal use for a period of one (1) year from the date of shipment by ATLAS (provided the products are installed before the expiration of the shelf life). THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR THE PURPOSE FOR THIS PRODUCT WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. ATLAS' LIABILITY FOR ALLEGED BREACH OF THIS WARRANTY SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT (BUT NOT INCLUDING REMOVAL OF THE DEFECTIVE PRODUCT OR INSTALLATION OF REPLACEMENT PRODUCTS). ATLAS SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES DURING THE WARRANTY PERIOD OR THEREAFTER. **ATLAS' WARRANTY IS VOIDED IF PAYMENT FOR PRODUCT IS NOT RECEIVED IN FULL.**