



# Test Option List

Description	Research Study	Pilot Scale Development
Test Results	Success based upon generation of customer-defined pellets, as determined by analysis	Scale up data obtained and/or quantity pelletization
Required Quantity of Sample	5-10 Gallons for disc/drum pelletization; 15-25 Gallons for pin mixer pelletization	55 Gallons minimum
Binders	Water and 2 binder additives; Additional binders will increase fee	Predetermined binder
Equipment	DP-14 Disc/Drum or 8D32L Pin Mixer	P-30 Disc, D-20 Drum or 12D54L Pin Mixer
Sample Yield	Jar quantities of green, air dried and oven dried pellets	2 Gallons or more of pelletized product
Special Conditions	None	Milling, pre-treatment, mixing, special feeding, drying, screening, or post-treatment at extra charge
Price	Up to \$1,500.00 per test	\$2,000.00 per day (one day minimum charge)

## MARS MINERAL

P.O. Box 719  
Mars, PA 16046  
Phone: 724-538-3000  
Fax: 724-538-5078  
info@marsmineral.com  
www.marsmineral.com

Division of Woodward, Inc.



# Test Option List



Mars Mineral maintains a laboratory and pilot scale testing facility to process materials for determining the pelletability of your material. The previous page describes the various types of tests available and should be used as a guideline in determining the testwork that you would like to be performed.

## Description of Laboratory Fees.

The quoted laboratory testing rates are for the use of our facility, equipment, laboratory technicians and supporting personnel. The Laboratory fees are charged either as a standard price (for Research Study), or at a daily rate (for Pilot Scale Development).

The Pilot Scale Test is based upon a daily charge, plus additions for optional processing equipment or material. The daily charge is a minimum charge. The number of days quoted for your project includes estimated time for set up of the pelletizing system, for clean up upon the test completion, special pre or post treatment of materials or pellets (milling, mixing, drying etc.) and for normal delays that occur during the project.

## Daily, Overtime and Weekend Rates.

The normal daily rate is for an eight (8) hour day from 7:30 AM to 3:30 PM, Monday through Friday. Time exceeding the normal workday will be invoiced at overtime rates. No overtime will be performed without written authorization by the customer.

## Extraneous Supplies.

Any special supplies needed for a test, and to be supplied by Mars Mineral, must be authorized by the customer in writing and will be invoiced at our cost plus 10%. All unused supplies will be returned to the customer upon completion of the test.

## Forms Required for Testing.

Before any testing begins, Mars Mineral must have in possession, a customer Purchase Order with down payment, a completed Agglomeration Questionnaire, a Material Safety Data Sheet and a completed Material Return Authorization form.

## Acceptance of Materials.

Mars Mineral must be notified in advance to the shipment of materials to our facility for testing. Mars Mineral must receive a Material Safety Data sheet at least 2 days prior to the shipment of the material. Written authorization from Mars Mineral must be obtained by the

customer prior to shipment or Mars Mineral will not accept the shipment.

Failure of the customer to properly notify Mars Mineral in writing about the properties of the materials will indemnify and hold Mars Mineral harmless from and against any and all claims, suits or liability whatsoever arising from or connected with any such injury, death or damage.

## Return of Materials.

Mars Mineral policy requires that all materials shipped to us for testing will be returned to the customer. There are no exceptions. The materials will include unused raw materials, product, off spec material and clean up. A Material Return Authorization form must be completed and returned to Mars Mineral prior to testing.

Arrangements for the return of the materials must be made prior to the test. All charges for the return of the material will be to the customers account and will be invoiced with the testing charges.

In the event that the testing is delayed or partially completed due to reasons beyond the control of Mars Mineral, the material will be held for a maximum of 30 days from the delay date. After 30 days the material will be returned to the customer by freight collect. If the customer refuses delivery of the material, it will be disposed of in accordance with the Material Safety Data Sheet and the customer will be billed for all related costs.

International customers must provide valid United Parcel Service (UPS) or Federal Express shipping account number or VISA, MasterCard, Discover or American Express information before authorization may be obtained to ship materials to Mars Mineral.

## Test Scheduling/Completion.

All tests will be scheduled according to the arrival date of all materials and forms. This schedule is tentative and is subject to change. Mars Mineral will notify the customer of the scheduled test date and will make every effort to hold the date selected.

## Terms of Payment.

The following payment terms will apply to all testing:

- 50% required with the purchase order and completed forms for testing .
- 50% required upon completion of the test after invoice by Mars Mineral.
- A 1.5% late charge will apply to all accounts over 30 days.



# Agglomeration Questionnaire

This questionnaire is to be completed and returned to Mars Mineral prior to testing of your materials. Please fill in as much as possible to enable the completion of the test program in a timely manner.

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Contact \_\_\_\_\_

Title \_\_\_\_\_

Phone No. \_\_\_\_\_ Fax No. \_\_\_\_\_

E-mail \_\_\_\_\_ Date \_\_\_\_\_

Type of test required, from test option list: \_\_\_\_\_

Your Purchase Order No. \_\_\_\_\_

All materials sent for testing must be returned. Please advise the shipping address the material is to be returned to.

Preferred Shipping Method \_\_\_\_\_

International customers must provide valid United Parcel Service (UPS) or Federal Express shipping account number or VISA, MasterCard, Discover or American Express information before authorization may be obtained to ship materials to Mars Mineral. Please provide credit card provider, account number, expiration date and name as it appears on the card.

Common name of the material: \_\_\_\_\_

If the material is a mixture, what are the specific components and what are their percentages:

Is the material hazardous? \_\_\_\_\_ Have you included an MSDS? \_\_\_\_\_

What is the source of the material? \_\_\_\_\_

Bulk Density: \_\_\_\_\_ PCF. Moisture Content: \_\_\_\_\_

Sieve Analysis of the material (percent retained): 10 mesh \_\_\_\_\_ 45 mesh \_\_\_\_\_  
80 mesh \_\_\_\_\_ 120 mesh \_\_\_\_\_ 200 mesh \_\_\_\_\_ 325 mesh \_\_\_\_\_ Pan \_\_\_\_\_

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# Agglomeration Questionnaire

If sieve analysis is not available, please give an example of particle consistency, such as flour, sand, fibers, lumps etc.

Product desired from the testing (pellet diameter or mesh size) \_\_\_\_\_

Please note any special conditions that are required of the finished pellet, such as pellet strength, moisture content, will the pellet be recycled, packaged or for disposal etc.

Water is the binder of choice, at least to establish a base for gauging the affect of other binding agents. Several binders are available for evaluation. Do you have a preference of binder choice or knowledge of materials that could be detrimental to your pelletized product?

What is the design production capacity in TPH?

## Terms and Conditions:

1. Mars Mineral requires your completed Agglomeration Questionnaire, a Material Safety Data Sheet (MSDS) and a Purchase Order with the appropriate down payment (see our Terms of Payment under "Test Option List"), to begin any test program. We accept Visa, MasterCard, Discover and American Express. These may be sent by mail, fax or email to the attention of "Test Lab". Returning samples will be prepaid and added to the test invoice or charged to customer's shipping account.

2. All materials received by Mars Mineral for testing will be returned. This includes unused and waste material. To facilitate this, please provide your shipping account number with your purchase order. International customers must provide valid United Parcel Service (UPS) or Federal Express shipping account number or VISA, MasterCard, Discover or American Express information before authorization may be obtained to ship materials to Mars Mineral.

3. Material sent to Mars Mineral should be sent in 5-gallon buckets for small samples. Larger samples will be accepted in drums (not to exceed 500 pounds per drum) or in bulk bags with bottom spout (not to exceed 2,000 pounds). Packaging other than this needs to be cleared with Mars Mineral prior to shipment.

4. A Material Safety Data Sheet must precede any and all materials at least two days in advance of shipment. Written authorization from Mars Mineral must be obtained prior to shipment or Mars Mineral will not accept the shipment. Failure of the customer to properly notify Mars Mineral about the properties of the materials will indemnify and hold harmless from and against any and all claims, suits or other liability whatsoever arising from or connected with any such injury, death or damage.

5. Send materials to: Attention Test Lab; Mars Mineral; 128 Myoma Road; Mars, PA 16046



# Material Return Authorization Form

Due to current regulations concerning the disposal of materials, Mars Mineral requires that all materials shipped to us for testing purposes **MUST** be returned to the customer upon completion of the test. All return arrangements must be made prior to the start of any testing.

Please complete the following form and return it to Mars Mineral, along with the other documentation required for testing.

Customer: \_\_\_\_\_

Billing Address: \_\_\_\_\_  
\_\_\_\_\_

Contact: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Material Name: \_\_\_\_\_

Testing P.O. Number: \_\_\_\_\_

Ship To Address: \_\_\_\_\_  
\_\_\_\_\_

Preferred Shipping: ☐ Collect ☐ Prepay and invoice ☐ UPS  
☐ Common Carrier ☐ Other \_\_\_\_\_

Your Name: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

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