

<b>Engineering Data Sheet (EDS) -Confidential</b>	Tel : +81-49-264-3049	Fax : +81-49-269-6850
---	-----------------------	-----------------------

Company : \_\_\_\_\_ Department : \_\_\_\_\_  
Address : \_\_\_\_\_  
City : \_\_\_\_\_ State : \_\_\_\_\_ Zip code : \_\_\_\_\_ Country : \_\_\_\_\_  
Telephone : \_\_\_\_\_ Fax : \_\_\_\_\_  
Submitted by : \_\_\_\_\_ Title : \_\_\_\_\_ Date : \_\_\_\_\_

1. Material (Please include MSDS along with this form)

1.1 Trade Name : \_\_\_\_\_  
1.2 Chemical Name : \_\_\_\_\_  
1.3 Amount of Material supplied : \_\_\_\_\_  
1.4 Container type : \_\_\_\_\_  
1.5 Sample delivery date : \_\_\_\_\_  
1.6 Delivery method : \_\_\_\_\_

2. Purpose (Please check)

2.1  Preliminary equipment evaluation  
2.2  Product evaluation  
2.3  Contract manufacturing

3. Process Requested (please check)

3.1  Air classification only

**\*\*NOTICE\*\* Maximum particle size of sample material :**

**must be under 0.5mm ( for TC-15, 25 ), 3.0mm ( for TC- 40, 60, 100 ) .**

**\*\*You have responsibility to pay for any damage to test equipment incurred with forbidden large particles.**

3.2  Grinding and classification  
           closed circuit system    open circuit system  
3.3  Grinding only  
3.4  Other \_\_\_\_\_

4. Feed Material Characteristics

4.1 Maximum particle size (microns) : \_\_\_\_\_  
4.2 Medium particle size (microns) : \_\_\_\_\_  
          by (measuring method) : \_\_\_\_\_  
4.3 Bulk density (loose) (g/cm<sup>3</sup>) : \_\_\_\_\_  
4.4 Specific gravity : \_\_\_\_\_  
4.5 Please check all those which applies  
           abrasive                    poisonous                    cohesive, adhesive  
           explosive                    electrostatic                other

5. Requirements :

5.1 End product should be :

Fine fraction       Coarse fraction       Middle fraction

5.2 Desired particle size distribution of the end product :  control sample shipped with feed

above \_\_\_\_\_ microns, \_\_\_\_\_ %

below \_\_\_\_\_ microns, \_\_\_\_\_ %

comments : \_\_\_\_\_  
 \_\_\_\_\_

5.3 Feed rate (kg/hr) : \_\_\_\_\_

5.4 Estimated production rate of end product (kg/hr) : \_\_\_\_\_

5.5 Please specify which of the following requirements is most important :

to get strict particle diameter rather than yield

to get certain yield rather than strict particle diameter

other \_\_\_\_\_

5.6 Minimum amount of target sample required for customer's evaluation : \_\_\_\_\_

5.7 Rest of tested and non-tested material should be :

Shipped back (collect) Carrier: \_\_\_\_\_ Account No.: \_\_\_\_\_

Shipped back (prepaid if you do not have a carrier account),  Other

\* The remained material may not be disposed of by Nisshin because of environmental regulation.

6. Particle Characterization

6.1 We have the following measuring apparatus. Please choose one.

Coulter counter Multisizer II Aperture : \_\_\_\_\_ microns

Microtrac (laser, wet) MT-3000  Microtrac (laser, wet) X-100

Microtrac (laser, wet) FRA  Mastersizer (laser, dry method)

Standard sieve  Air Jet Sieve

BET surface area  Blaine surface area

SEM electronic microscope  Nisshin recommended method

6.2 Dispersion condition :

Liquid and/or Media : \_\_\_\_\_

Wet reagent : \_\_\_\_\_

Ultrasonic wave bath (sec./min.) : \_\_\_\_\_

Other : \_\_\_\_\_

7. Please specify contamination allowance (if required) : \_\_\_\_\_

8. Have you processed this material before? Please describe results.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**CONFIDENTIALITY**

Nisshin will hold in confidence the identification of your sample, and confidentially marked specifications from you, the date we generate, and the results we provide to you. Nisshin dispose all excess sample material, unless make specific provision for its return.

MATERIAL SAFETY DATA SHEETS (MSDS) ARE REQUIRED BEFORE SAMPLES CAN BE PROCESSED.