POROCEL CORPORATION

Under Section 245 and 242

of the

Delaware General Corporation Law

We, Irving D. Isko, President and Charles L. Gifford, Secretary of POROCEL COMPORATION, do hereby certify under the seal of said corporation as follows:

- 1. That the name of the corporation is POROCEL CORPORATION.
- 2. That the certificate of incorporation of the corporation was filed by the Secretary of State, Dover, Delaware, on the 28th day of November, 1938.
- 3. The amendments to the certificate of incorporation effected by this certificate are to change the name of the corporation and to comprehensively amend each and every term of the certificate of incorporation.
- 4. The amendment(s) and the restatement of the certificate of incorporation have been duly adopted in accordance with the provisions of the General Corporation has of the State of Delaware by the unanimous written consent of the holders of all outstanding shares entitled to vote.
- 5. That the text of the certificate of incorporation of said POROCEL COR-PORATION, as amended, is hereby restated, as further amended by this certificate, to read in full, as follows:

RESTATED CERTIFICATE OF INCORPORATION

OF

ENGELHARD CORPORATION

FIRST: The name of the Corporation is ENGELHARD CORPORATION.

SECOND: The registered office of the Corporation in the State of Delaware is located at No. 100 West Tenth Street, in the City of Wilmington, County of New Castle. The name and address of its registered agent is The Corporation Trust Company, No. 100 West Tenth Street, Wilmington, Delaware.

THIRD: The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH: The total number of shares of capital stock that may be issued by the Corporation is 65,000,000, of which 5,000,000 shares, without par value, shall be Preferred Stock (hereinafter in this Article FOURTH referred to as "Preferred Stock"), and of which 60,000,000 shares, par value of \$1 per share, shall be Common Stock. Shares of the stock of any class of the Corporation may be issued by the Corporation from time to time for such legally sufficient consideration as may be fixed from time to time by the Board of Directors. Any and all shares so issued for which the consideration is so fixed has been paid or delivered to the Corporation and shall be deemed fully paid stock and shall not be liable to any further call or assessment thereon, and the holders of said shares shall not be liable for any further payments in respect of such shares.

A description of the different classes of stock of the Corpuration and a statement of the designations and the powers, preferences and rights, and the qualifications, limitations or restrictions thereof, in respect of each class of said stock are as follows:

PART I. Provisions Applicable to All Series of Preferred Stock

(a) The Preferred Stock may be issued from time to time in one or more series. The terms of each series shall be as specified in this Part I and in the resolution or resolutions adopted by the Board of Directors providing for the issue of such series, which resolution or resolutions the Board of Directors is hereby expressly authorized to adopt. Such resolution or resolutions with respect to a series shall specify: (1) the number of shares to constitute such series and the distinctive designation thereof; (2) the annual dividend rate on the shares of such series, whether or not dividends shall be cumulative, and the date or dates from which dividends shall accrue and, if cumulative, shall be cumulative; (3) the time or times and price or prices of redemption, if any, of the shares of such series; (4) the terms and conditions of a retirement or sinking fund, if any, for the purchase or redemption of the shares of such series; (5) the amount which shares of such series shall be entitled to receive in the event of any liquidation, dissolution or winding up of the Corporation; (6) the terms and conditions, if any, on which shares of such series shall be convertible into, or exchangeable for, shares of stock of any other class or classes, or other series of the same class, of the Corporation; (7) the voting rights, if any, of shares of such series in addition to those granted by paragraph (e) of this Part I; (8) the status as to reissuance or sale of shares of such series redeemed, purchased or otherwise reacquired, or surrendered to the Corporation on conversion or exchange; (9) the conditions and restrictions, if any, on the payment of dividends or on the making of other distributions on, or the purchase, redemption or other acquisition by the Corporation or any subsidiary, of the Common Stock or of any other class of stock of the Corporation ranking junior to the shares of such series as to dividends upon liquidation; (10) the conditions and restrictions, if any, on the creation of indebtedness of the Corporation, or any subsidiary, or on the issue of any additional stock ranking on a parity with or prior to the shares of such series as to dividends or upon liquidation; and (11) such other preferences, rights, restrictions and qualifications as shall not be inconsistent herewith.

All shares of the Preferred Stock shall rank equally and be identical in all respects regardless of series, except as to terms which may be specified by the Board of Directors pursuant to the foregoing provisions of this paragraph (a). All shares of any one series of the Preferred Stock shall be of equal rank identical in all respects, except that shares of any one series issued at different times may differ as to the dates from which dividends thereon shall accrue and be cumulative.

- (b) The holders of the Preferred Stock shall be entitled to receive out of the net profits or net assets of the Corporation available for dividends, when and as declared by the Board of Directors, cash dividends at the annual rate specified for each particular series, and no more, payable quarterly on March 31, June 30, September 30 and December 31 in each year, accruing from the date or dates specified for each such series, before any dividends shall be declared and paid upon or set apart for the Con.mon Stock. If dividends on the Preferred Stock of any series are not paid in full or declared in full and sums set apart for the payment thereof, then no dividends shall be declared and paid on any such stock unless declared and paid ratably on all shares of each series of the Preferred Stock then outstanding, including dividends accrued or in arrears, if any, in proportion to the respective amounts that would be payable per share if all such dividends were declared and paid in full.
- (c) The Preferred Stock shall be preferred over the Common Stock as to assets, and in the event of any liquidation or dissolution or winding up of the Corporation (whether voluntary or involuntary), the holders of the Preferred Stock shall be entitled to receive out of the assets of the Corporation available for distribution to its stockholders, whether from capital, surplus or earnings, the amount specified for each particular series, together with all dividends accrued or in arrears, for every share of their holdings of Preferred Stock before any distribution of the assets shall be made to the holders of the Common Stock, and shall be entitled to no other or further distribution. If upon any liquidation, dissolution or winding up of the Corporation the assets distributante among the holders of Preferred Stock shall be insufficient to

permit the payment in full to the holders of the Preferred Stock of all preferential amounts payable to all such holders, then the entire assets of the Corporation thus distributable shall be distributed ratably among the holders of the Preferred Stock in proportion to the respective amounts that would be payable per share if such assets were sufficient to permit payment in full.

Neither the consolidation nor merger of the Corporation with or into any other corporation, nor any sale, lease, exchange or conveyance of all or any part of the property, assets or business of the Corporation shall be deemed to be a liquidation, dissolution or winding up of the Corporation within the meaning of this Article FOURTH.

- (d) The whole or any part of the Preferred Stock at any time outstanding, or the whole or any part of any series thereof, may be redeemed by the Corporation at its election, expressed by resolution of the Board of Directors, upon not less than 30 days' previous notice to the holders of record of the Preferred Stock to be redeemed, given as hereinafter provided, at the time or times and price or prices specified for each particular series together with all dividends accrued or in arrears (hereinafter in this paragraph called "the redemption price"). If less than all of the Preferred Stock then outstanding, or of any series thereof, is to be redeemed, the redemption may be made either by lot or pro rata, in such manner as may be prescribed by resolution of the Board of Directors. Notice of such election of the Corporation shall be given by publication in a newspaper of general circulation in the Borough of Manhattan, The City of New York, such publication to be made not less than 30 nor more than 60 days prior to the redemption date fixed by the Board of Directors and specified therein. A similar notice shall be mailed by the Corporation, postage prepaid, not less than 30 nor more than 60 days prior to such redemption date, addressed to the respective holders of record of the Preferred Stock to be redeemed at their respective addresses as the same shall appear on the stock transfer records of the Corporation, but the mailing of such notice shall not be a condition of such redemption. Notice having been so given by publication, from and after the date specified therein as the date of redemption, unless default shall be made by the Corporation in providing moneys for the payment of the redemption price pursuant to such notice, all dividends on the Preferred Stock thereby called for redemption shall cease to accrue, and from and after the date of redemption so specified, unless defaults shall be made by the Corporation as aforesaid, or from and after the date (prior so the date of redemption so specified) on which the Corporation shall provide the moneys for the payment of the redemption price by depositing the amount thereof with a bank or trust company doing business in the Borough of Manhattan, The City of New York, and having a capital and surplus of at least \$10,000,000, provided that the notice of redemption shall state the intention of the Corporation to deposit such amount on a date in such notice specified, all rights of the holders thereof as stockholders of the Corporation, except the right to receive the redemption price (but without interest), and the right, if any, to exercise all privileges of conversion specified for any particular series, shall cease and determine. Any interest allowed on moneys so deposited shall be paid to the Corporation. Any moneys so deposited which shall remain unclaimed by the holders of such Preferred Stock at the end of six years after the redemption date, shall become the property of, and be paid by such bank or trust company to, the Corporation.
- (e) So long as any shares of Preferred Stock shall be outstanding and unless the consent or approval of a greater number of shares shall then be required by law, without first obtaining the consent or approval of the holders of at least two-thirds of the number of such shares at the time outstanding, given in person or by proxy at a meeting at which the holders of such shares shall be entitled to vote separately as a class, the Corporation shall not: (1) authorize shares of any class or series of stock having any preference or priority as to dividends or upon liquidation (hereinafter referred to as "Senior Stock") over the Preferred Stock; (2) reclassify any shares of stock of the Corporation into shares of Senior Stock; (3) authorize any security exchangeable for, convertible into, or evidencing the right to purchase any shares of Senior Stock; (4) amend, alter or repeal the Certificate of Incorporation of the Corporation to alter or change the preferences, rights or powers of the Preferred Stock so as to affect such stock adversely, provided, however, that if any such amendment, alteration or repeal would alter or change the preferences, rights or powers of one or more, but not all, of the series of the Preferred Stock at the time outstanding, the consent or approval of the holders of at least two-thirds of the number of the outstanding shares of each such series so affected, similarly given, shall be required in lieu of (or if such consent is required by law, in addition to)

the consent or approval of the holders of at least two-thirds of the number of outstanding shares of Preferred Stock as a class; or (5) effect the voluntary liquidation, dissolution or winding up of the Corporation, or the sale, lease, exchange of all or substantially all of the assets, property or business of the Corporation, or the merger or consolidation of the Corporation with or into any other corporation (except a wholly-owned subsidiary of the Corporation); provided, however, that no separate vote of the holders of the Preferred Stock as a class shall be required in the case of a merger or consolidation or a sale, exchange or conveyance of all or substantially all of the assets, property or business of the Corporation (such transactions being hereinafter in this provise referred to as a "reorganization") if (x) the resulting, surviving or acquiring corporation will have after such reorganization no stock either authorized or outstanding (except such stock of the Corporation as may have been authorized or outstanding immediately precedent such reorganization, or such stock of the resulting, surviving or acquiring corporation as may be issued in exchange therefor) ranking prior to, or on a parity with, the Preferred Stock or the stock of the resulting, surviving or acquiring corporation issued in exchange therefor and (y) each holder of shares of Preferred Stock immediately preceding such reorganization will receive in exchange therefor the same number of shares of stock, with substantially the same preferences, rights and powers, of the resulting, surviving, or acquiring corporation.

So long as any shares of Preferred Stock shall be outstanding and unless the consent or approval of a greater number of shares shall then be required by law, without first obtaining the consent or approval of the holders of a majority of the number of such shares at the time outstanding, given in person or by proxy at a meeting at which the holders of such shares shall be entitled to vote separately as a class, the Corporation shall not amend the provisions of its Certificate of Incorporation so as to increase the amount of the authorized Preferred Stock or so as to authorize any other stock ranking on a parity with the Preferred Stock either as to payment of dividends or upon liquidation.

PART II. Provisions Applicable To Common Stock

- (a) After the requirements in respect of dividends upon the Preferred Stock, as hereinbufore set forth, to the end of the then current quarterly dividend period for said stock, shall have been met, the holders of the Common Stock shall be extitled to receive out of any remaining net profits or net assets of the Corporation available for dividends, such dividends as may from time to time be declared by the Board of Directors, and the holders of the Common Stock shall be entitled to share ratably in any dividends so declared to the exclusion of the holders of the Preferred Stock.
- (b) In the event of any liquidation or dissolution or winding up of the Corporation (whether voluntary or involuntary), after payment in full of the amounts hereinbefore stated to be payable in respect of the Preferred Stock, the holders of the Common Stock shall be entitled, to the exclusion of the holders of the Preferred Stock, to share ratably in all the assets of the Corporation then remaining.
- (c) Except as otherwise provided in this Certificate of Incorporation or as otherwise made mandatory by law, each holder of Common Stock shall be entitled to one vote for each full share of such stock then outstanding and of record in his name on the books of the Corporation and the holders of the Common Stock shall vote together with the holders of any series of Preferred Stock who are entitled to vote in such manner and the holders of any other class of stock of the Corporation who are entitled to vote in such manner, and not as a separate class.
- FIFTH: (a) The Board of Directors shall consist of no fewer than six and no more than twelve directors. In case of any increase in the number of directors, the additional directors shall be chosen as may be prescribed in the By-Laws of the Corporation.
- (b) The Board of Directors shall be divided into three classes, Class I, Class II and Class III, with respect to their terms of office. All classes shall be as nearly equal in number as possible, and no class shall include less than two directors. Subject to such limitations, when the number of directors is changed, any newly-created directorships or any decrease in directorships shall be apportioned among the classes by action of the Board of Directors or the stockholders.

(c) The terms of office of the directors initially classified shall be as follows: that of Class I shall expire at the Annual Meeting of stockholders to be held in 1982; that of Class II shall expire at the Annual Meeting of stockholders to be held in 1983; and that of Class III shall expire at the Annual Meeting of stockholders to be held in 1984. At each Annual Meeting of stockholders after such initial classification, directors to replace those whose terms expire at such Annual Meeting shall be elected to hold office until the third succeeding Annual Meeting.

SIXTH: In furtherance and not in limitation of the general powers conferred by the laws of the State of Delaware, the Board of Directors is expressly authorized to make, alter, or repeal the By-Laws of the Corporation in a manner not inconsistent with the laws of Delaware.

SEVENTH: (a) Subject to the provisions of any series of Preferred Stock which may at the time be outstanding, notwithstanding any other provisions of this Certificate of Incorporation and except as set forth in subdivision (b) of this Article SEVENTH, if any of the following transactions are proposed to be entered into with a "five percent beneficial owner" (as defined in subdivision (c) hereof), the affirmative vote or consent of the holders of not less than eighty percent (20%) of the outstanding shares of Common Stock of the Corporation (including at least fifty percent (50%) of the outstanding shares of Common Stock held by stockholders other than a five percent beneficial owner) shall be required:

a, to adopt any agreement for, or to approve, the merger or consolidation of the Corporation or any subsidiary (as defined in subdivision (c) hereof) with or into a five percent beneficial owner;

b. to authorize any sale, lease, transfer, exchange, mortgage, pledge, or other disposition to a five percent beneficial owner of all or any portion of the assets of the Corporation or any subsidiary, other than in the ordinary course of business;

- c. to authorize the issuance or transfer by the Corporation or any subsidiary of any voting securities of the Corporation or any subsidiary in exchange or payment for the securities or assets (including cash) of a five percent beneficial owner.
- (b) The provisions of subdivision (a) of this Article SEVENTH shall not apply to (i) any transaction described therein if the Board of Directors by resolution shall have approved an agreement with such five percent beneficial owner setting forth the principal terms of such transaction and such transaction is substantially consistent therewith, provided that a majority of those members of the Board of Directors voting in favor of the resolution approving the agreement were duly elected and acting members of the Board of Directors prior to the time such five percent heneficial owner first became such a beneficial owner or (ii) any transaction described therein if the transaction is solely between this Corporation and another corporation, fifty percent (50%) or more of the voting stock of which is owned by this Corporation and none of which is owned by a five percent beneficial owner; provided that each stockholder of this Corporation receives the same type of consideration in such transaction in proportion to his stockholdings.

(c) As used in this Article SEVENTH:

A. Any specified person shall be deemed to be the "beneficial owner" of shares of stock of the Corporation (i) which such specified person or any of its affiliates or associates (as such terms are hereinafter defined) owns, directly or indirectly, whether of record or not, (ii) which such specified person or any of its affiliates or associates has the right to acquire pursuant to any agreement, or upon exercize of conversion rights, warrants or options, or otherwise, (iii) which are beneficially owned, directly or indirectly (including shares deemed owned through application of clauses (i) and (ii) above) by any other person with which-such specified person or any of its affiliates or associates has any agreement, arrangement or understanding for the purpose of acquiring, holding, voting or disposing of stock of the Corporation, or (iv) which such specified person or any of its affiliates or associates has the right to acquire by reason of tenders of shares submitted to them by other shareholders of the Corporation in connection with or pursuant to a tender offer made by such specified person or any of its affiliates or associates;

- B. a "subsidiary" is any corporation at least fifty percent (50%) of the voting securities of which are owned, directly or indirectly, by this Corporation;
 - C. a "person" is any individual, corporation, partnership or other entity:
- D. an "affiliate" of a specified person is any person that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, the specified person:
- E. an "associate" of a specified person is (i) any corporation or organization of which such specified person is an officer or partner or is, directly or indirectly, the beneficial owner of ten percent (10%) or more of any class of equity securities, (ii) any trust or other estate in which such specified person has a substantial beneficial interest or as to which such specified person serves as trustee or in a similar capacity, or (iii) any relative or spouse of such specified person, or any relative of such spouse, who has the same home as such specified person or who is a director or officer of any corporation which is an affiliate of such specified person; and
- F. a "five percent beneficial owner" is any person who is the beneficial owner of five percent (5%) or more of the outstanding shares of the Corporation entitled to vote in elections of directors, such determination to be made as of the record date of shareholders entitled to receive notice of, and to vote on or coasent to, any of the transactions set forth above in subdivision (a) of this Article SEVENTH, provided, however, that any person who sirst became the beneficial owner of such five percent or shares of the Corporation solely as a result of a distribution of the Corporation's Common Stock to the holders of Common Stock of Engelhard Minerals & Chemicals Corporation shall not be deemed to be a "five percent beneficial owner" for purposes of this Article SEVENTH.
- (d) For purposes of determining whether a person is a five percent beneficial owner, the outstanding shares of the Corporation shall include shares deemed owned through application of clauses (i), (ii), (iii) and (iv) of subdivision (c)A. above, but shall not include any other shares which may be issuable to others pursuant to any agreement or upon exercise of conversion rights, warrants, or options.
- (e) The Board of Directors shall have the power and duty to determine, for purposes of this Article SEVENTH, on the basis of information known to such Board,
 - a. whether any party to a transaction referred to in subdivision (a) of this Article SEVENTH is a five percent beneficial owner; and
 - b. whether a proposed transaction is subject to the provisions of subdivision (a) or (b) of this Article SEVENTH.

Any such determination shall be conclusive and binding for all purposes of this Article SEVENTH.

EIGHTH: No amendment to this Certificate of Incorporation shall amend, alter, change or repeal any of the provisions of Article FIFTH or Article SEVENTH or this Article EIGHTH unless the amendment effecting such amendment, alteration, change or repeal shall receive the affirmative vote of the holders of not less than eighty percent (80%) of the outstanding shares of Common Stock of this Corporation (including at least fifty percent (50%) of the outstanding shares of Common Stock held by stockholders other than a five percent beneficial owner).

NINTH: The Corporation may, to the full extent permitted by Section 145 of the General Corporation Law of the State of Delaware, as amended from time to time, indemnify such persons who it may indemnify pursuant thereto.

CERTIFICATE OF AMENDMENT OF CERTIFICATE OF INCORPORATION

and Secretary, respectively, of Engelhard Minerals & Chemicals Corporation, a corporation organized and existing under the laws of the State of Delaware, hereby certify:

FIRST: That the Certificate of Incorporation of Eugelhard Minerals & Chemicals Corporation is amended by deleting therefrom what is presently Article First and replacing the deleted material with the following:

"First: The name of this corporation is Phibio Corporation".

SECOND: That the foregoing amendment has been duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

THIRD: That the capital of Engelhard Minerals & Chemicals Corporation will not be reduced under or by reason of said amendment.

FOURTH. That the foregoing amendment shall become effective at the time and on the day this certificate is filed in accordance with Section 103 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, this certificate has been made under the seal of Engelhard Minerals & Chemicals Corporation and has been signed by the undersigned, and Secretary, respectively, of Engelhard Minerals & Chemicals Corporation this day of , 1981.

| Attest: | | , |
|---------|-----------|---|
| | Secretary | |