MIL-C-324C
30 August 1983
SUPERSEDING
MIL-C-324B
20 August 1976

MILITARY SPECIFICATION

CALCIUM SILICIDE, TECHNICAL

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers two types of technical grade calcium silicide ($CaSi_2$).

1.2 Classification. Calcium silicide shall be of the following types as specified (see 6.2):

Type I
Type II

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications, standards, and handbooks. Unless otherwise specified, the following specifications, standards, and handbooks of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation form a part of this specification to the extent specified herein.

SPECIFICATIONS

FEDERAL

NN-P-71 - Pallets, Material Handling, Wood, Stringer Construction, 2-Way and 4-Way (Partial)
PPP-P-704 - Pails, Metal: (Shipping, Steel, 1 Through 12 Gallons)

: Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed: to: Commander, Armament Research and Development Center, US Army Armament, Munitions and Chemical Command, ATTN: DRSMC-TSC-S(A), Aberdeen Proving Ground, MD 21010 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

STANDARDS

MILITARY

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes
MIL-STD-129 - Marking for Shipment and Storage
MIL-STD-147 - Palletized Unit Loads
MIL-STD-1168 - Ammunition Lot Numbering

2.1.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this specification to the extent specified herein.

CODE OF FEDERAL REGULATIONS (CFR)

49 CFR 171 to 179 - Department of Transportation Hazardous Materials Regulations

(The Code of Federal Regulations is available from the Superintendent of Documents, US Government Printing Office, Washington, DC 20402. Orders for the above publication should cite "49 CFR 171 to 179.")

(Copies of specifications, standards, handbooks, drawings, and publications required by manufacturers in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting officer.)

2.2 Other publications. The following documents form a part of this specification to the extent specified herein. The issues of the documents which are indicated as DoD adopted shall be the issue listed in the current DoDISS and the supplement thereto, if applciable.

UNIFORM FREIGHT CLASSIFICATION RULES

(Application for copies should be addressed to the Uniform Classification Committee, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.)

NATIONAL MOTOR FREIGHT CLASSIFICATION RULES

(Application for copies should be addressed to the American Trucking Associations, Inc., Traffic Department, 1616 P Street, NW, Washington, DC 20036.)

ASTM STANDARDS

D1193 - Reagent Water
E11 - Wire-Cloth Sieves For Testing Purposes

(Application for copies should be addressed to ASTM, 1916 Race Street, Philadelphia, PA 19103.)

(Industry association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

2.3 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein, the text of this specification shall take precedence.

3. REQUIREMENTS

3.1 Chemical characteristics. Calcium silicide shall conform to the applicable chemical characteristics of table I when tested as specified therein.

TABLE I. Chemical characteristics

Characteristic	Percent by weight		Test paragraph
	Type I	Type II	
Moisture, maximum	0.1	0.1	4.2.4.1
Silicon, minimum	60.0	60.0	4.2.4.2
Total iron, maximum	10.0	3.8	4.2.4.3
Calcium, minimum	20.0	30.0	4.2.4.4
Total silicon, calcium, and iron, minimum	92.0	---	4.2.4.5
Metallic iron, maximum	0.2	---	4.2.4.6
Alkalinity (as CaO), maximum	2.0	---	4.2.4.7
Free carbon, maximum	3.0	---	4.2.4.8
Carbides and phosphides	To pass test	---	4.2.4.9

3.2 Particle size characteristics. Calcium silicide shall conform to the applicable particle size characterisitics of table II when tested as specified in 4.2.4.10.

3.3 Apparent density (type I only). Type I calcium silicide shall have an apparent density of no less than 1.20 grams (g) per milliliter (mL) and no more than 1.50 g per mL when tested as specified in 4.2.4.11.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

TABLE II. Particle size characteristics

Characteristic	Type I	Type II	
	Min percent by weight	Min percent by weight	Max percent by weight
Retained on 150-micrometer sieve	---	---	1
Passing 150-micrometer sieve	99.9	---	---
Retained on 106-micrometer sieve	---	---	1
Retained on 75-micrometer sieve	---	6	12
Passing 63-micrometer sieve	65.0	---	---
Retained on 45-micrometer sieve	---	25	50
Passing 45-micrometer sieve	---	40	65

4.2 Quality conformance inspection.

4.2.1 Lotting. A lot shall consist of the calcium silicide produced by one manufacturer, at one plant, from the same materials, and under essentially the same manufacturing conditions provided the operation is continuous. In the event the process is a batch operation, each batch shall constitute a lot (see 6.3). Each lot shall be identified and controlled in accordance with MIL-STD-1168.

4.2.2 Sampling.

4.2.2.1 For examination of packaging. Sampling shall be conducted in accordance with MIL-STD-105.

4.2.2.2 For calcium silicide test. See 6.5 for sampling and testing precautions. Sampling shall be conducted in accordance with table III. A representative specimen of approximately 500 g shall be removed from each sample container and placed in a suitable clean, dry container labeled to identify the lot and container from which it was taken.

4.2.2.3 For container leakage test. Sampling shall be conducted in accordance with MIL-STD-105.

TABLE III. Sampling for calcium silicide test

Number of containers in batch or lot	Number of sample containers
3 to 150	3
151 to 1,200	5
1,201 to 7,000	8
7,001 to 20,000	10
Over 20,000	20

4.2.3 Inspection procedure.

4.2.3.1 For examination of packaging. The sample unit shall be one filled unit container, ready for shipment. Sample unit containers shall be examined for the following defects:

AQL 1.0 percent defective

(a) Container damaged or leaking

AQL 2.5 percent defective

(b) Contents per container not as specified
(c) Container not as specified
(d) Container closure not as specified
(e) Unitization not as specified
(f) Marking incorrect, missing, or illegible

4.2.3.2 For calcium silicide test. Each sample specimen taken in 4.2.2.2 shall be tested as specified in 4.2.4. Failure of any test by any specimen shall be cause for rejection of the lot represented.

4.2.3.3 For container leakage test. The sample unit shall be one container. The sample containers selected in 4.2.2.3 shall be tested as specified in 4.2.5 using an AQL of 1.0 percent defective.

4.2.4 Calcium silicide tests. See 6.5 for sampling and testing precautions. Water in accordance with ASTM D1193 and reagent grade chemicals shall be used throughout the tests. Where applicable, blank determination shall be run and corrections applied where significant. Tests shall be conducted as follows:

4.2.4.1 Moisture. Heat a moisture dish and its glass stopper in an oven at 100° to 110°C for 1 hour, cool in a desiccator, and weigh to the nearest 0.1 milligram (mg). Transfer approximately 10 g of the specimen to the dry dish, stopper, and weigh to the nearest 0.1 mg. Heat unstoppered in an oven at 100° to 110°C for 1 hour, cool in a desiccator, replace the stopper, and weigh to the nearest 0.1 mg. Repeat the heating for half-hour periods until successive weighings differ by no more than 0.2 mg, but do not continue the heating for more than 3 hours. Calculate the percent by weight moisture as follows:

$$\text{Percent moisture} = \frac{100\ (A - B)}{W}$$

where: A = Weight of stoppered dish and specimen before heating, in grams,
B = Weight of stoppered dish and specimen after heating, in grams, and
W = Weight of specimen in grams.

4.2.4.2 Silicon. Weigh to the nearest 0.1 mg approximately 0.5 g of the specimen and transfer to a 60-mL nickel crucible. Add 5 g of a finely powdered fusion mixture composed of equal parts of anhydrous potassium carbonate and anhydrous sodium carbonate with 3 percent potassium nitrate added. Mix the fusion mixture with the specimen, place an additional 3 g of fusion mixture on top of the mixture in the crucible, and cover with a lid. Heat the crucible and contents over a Meker burner, gradually increasing the temperature. If fusion does not occur at full heat, cool, add about four pellets of sodium hydroxide (about 0.5 g), and gradually raise the temperature. Finally heat at the highest temperature obtainable with the burner. Cool, and extract the melt with water. Subject any unfused residue to a further fusion with sodium hydroxide, extract, and add to the first solution. Acidify the total extract with 1 to 9 hydrochloric acid and evaporate to dryness at low heat on a hotplate under a hood. Break up the residue with a glass rod to facilitate drying. Bake the dry residue at 100° to 112°C for about 1 hour, but no longer. Take up the residue in 1 to 9 hydrochloric acid. Digest for 15 minutes on a steam bath, filter through a medium texture filter paper, and wash with hot 1 to 19 hydrochloric acid. Transfer the residue completely and save it for ignition. Repeat the dehydration procedure on the filtrate and washings, evaporating to dryness, baking for 1 hour at 110° to 112°C, treating the dry residue with cold 1 to 19 hydrochloric acid solution as before, and finally filtering. Wash the second residue with cold 1 to 99 hydrochloric acid. Dilute the filtrate to exactly 250 mL with water and save for the determination of total iron in 4.2.4.3 and calcium in 4.2.4.4. Heat the wet paper and residue from the second filtration in a platinum crucible until the paper is charred, then add the paper containing the first residue and heat to the same condition. Burn off the carbon in a partially-covered crucible at low heat. Cover the crucible tightly and ignite the specimen over a Meker burner for 25 minutes. Cool in a desiccator and weigh to the nearest 0.1 mg. Repeat the ignition in the same manner until the weight becomes constant. Under a hood, carefully moisten the weighed residue with a few drops of concentrated sulfuric acid and add about 5 mL of concentrated hydrofluoric acid directly from the reagent bottle. Add these liquids under a slightly raised crucible cover to avoid mechanical loss of the residue. Heat the crucible evenly on a hotplate to evaporate the sulfuric acid, then ignite over a Meker burner for about 10 minutes. Cover and cool in a desiccator, and quickly weigh to the nearest 0.1 mg. Run a blank and calculate the percent by weight silicon as follows:

$$\text{Percent silicon} = \frac{46.72\ (A - B)}{W}$$

where: A = Loss in weight of the specimen after the hydrofluoric acid treatment, in grams,
B = Loss in weight of the blank after the hydrofluoric acid treatment, in grams, and
W = Weight of specimen in grams.

4.2.4.3 Total iron.

(a) Stannous chloride solution. Dissolve 50 g of stannous chloride, dihydrate ($SnCl_2 \cdot 2H_2O$) in 100 mL of concentrated hydrochloric acid and dilute to 1 liter (L) with water.

(b) Mercuric chloride solution. Stir 10 g of mercuric chloride in 100 mL of water. Use the clear supernatant liquid.

(c) Zimmerman-Reinhardt reagent. Dissolve 51 g of manganous sulfate, monohydrate ($MnSO_4 \cdot H_2O$) in 300 mL of water. Add a cooled mixture of 130 mL of concentrated sulfuric acid in 300 mL of water, 138 mL of concentrated phosphoric acid, and dilute to 1 L with water.

(d) Procedure. Transfer a 100-mL aliquot of the filtrate reserved from the determination of silicon (see 4.2.4.2) to a 600-mL beaker and heat to boiling. While still hot, reduce the iron by adding stannous chloride solution prepared as specified in (a) dropwise until the solution is completely decolorized. Add 1 to 2 drops in excess. Cool and add at one stroke 15 mL of mercuric chloride solution prepared as specified in (b). Allow to stand for 5 to 10 minutes covered with a watchglass. Dilute to 400 mL with water, add 25 mL of the Zimmermann-Reinhardt reagent prepared as specified in (c), and titrate immediately with 0.1N potassium permanganate solution. Run a blank. Calculate the percent by weight total iron as follows:

$$\text{Percent total iron} = \frac{13.96\ A(B - C)}{W}$$

where: A = Normality of the potassium permanganate solution,
B = Milliliters of potassium permanganate solution used to titrate the specimen,
C = Milliliters of potassium permanganate solution used to titrate the blank, and
W = Weight of specimen in 4.2.4.2, in grams.

4.2.4.4 Calcium. Take a 100-mL aliquot of the filtrate reserved from the determination of silicon (see 4.2.4.2), add 2 to 3 drops of methyl red indicator solution, and 1 to 1 ammonium hydroxide solution until the indicator turns yellow. Boil for 1 to 3 minutes, then digest the solution for about 10 minutes or until the precipitate has coagulated. Filter through a medium texture filter paper into a 250-mL beaker and wash the precipitate with 2-percent ammonium chloride solution. Discard the residue. Boil the combined filtrate and washings until the volume is reduced to approximately 50 mL. Acidify the solution by the addition of concentrated hydrochloric acid to about pH 1, as shown by indicator paper. Add 15 mL of a saturated solution of ammonium oxalate, 2 to 3 drops of methyl red indicator, if necessary, and 15 g of dry urea. Heat near the boiling point until the color of the methyl red changes from red to yellow and the calcium oxalate precipitates. Filter the precipitate through a porcelain filter crucible. Wash several times with hot water. Place the crucible

in a 250-mL beaker containing 150 mL of water and 15 mL of 1 to 1 sulfuric acid heated to 80° to 90°C. Allow the acid to react with precipitate while carefully stirring the solution until the precipitate is completely dissolved. Without removing the crucible, immediately titrate the solution with 0.1N potassium permanganate solution until a pink color is obtained that remains for at least 15 seconds. The temperature during the titration with the potassium permanganate should be no less than 60°C. Do not mistake the initial slow disappearance of the permanganate color for the end point. This may be avoided by the addition of a small crystal of manganous sulfate, monohydrate just before the titration. Run a blank. Calculate the percent by weight calcium as follows:

$$\text{Percent calcium} = \frac{5.01\ A(B - C)}{W}$$

where: A = Normality of potassium permanganate solution,
B = Milliliters of potassium permanganate solution used to titrate the specimen,
C = Milliliters of potassium permanganate solution used to titrate the blank, and
W = Weight of specimen in 4.2.4.2, in grams.

4.2.4.5 Total silicon, calcium, and iron. Calculate the percent by weight total silicon, calcium, and iron as follows:

$$\text{Percent total silicon, calcium, and iron} = A + B + C$$

where: A = Percent silicon calculated in 4.2.4.2,
B = Percent total iron calculated in 4.2.4.3, and
C = Percent calcium calculated in 4.2.4.4.

4.2.4.6 Metallic iron. Transfer approximately 2 g of the specimen, weighed to the nearest milligram, into a 250-mL Erlenmeyer flask and add 3 g of mercuric chloride. Displace the air from the flask with a continuous flow of carbon dioxide and add 100 mL of boiling water. Transfer to a steam bath for 10 minutes and agitate frequently while continuing the flow of carbon dioxide. Cool, discontinue the flow of carbon dioxide, filter, and wash the residue with hot water, catching the filtrate in a beaker containing 25 mL of Zimmerman-Reinhardt reagent prepared as specified in 4.2.4.3(c) and 350 mL of water. Titrate immediately with 0.1N potassium permanganate from a microburet. Run a blank. Calculate the percent by weight metallic iron as follows:

$$\text{Percent metallic iron} = \frac{5.585\ A(B - C)}{W}$$

where: A = Normality of the potassium permanganate solution,
B = Milliliters of potassium permanganate solution used to titrate the specimen,
C = Milliliters of potassium permanganate solution used to titrate the blank, and
W = Weight of specimen, in grams.

4.2.4.7 Alkalinity. Weigh to the nearest milligram, approximately 2.5 g of the specimen and transfer to a 400-mL beaker. Dissolve 0.5 g of ammonium nitrate in 200 mL of water, add this solution to the specimen, and allow to stand for 2 hours at 20°C with intermittent stirring. Filter the mixture through a Buchner funnel, wash the residue with a small quantity of water, and transfer the filtrate to a 250-mL volumetric flask. Dilute to the mark with water and mix well. Remove a 100-mL aliquot, add 2 to 3 drops of methyl orange indicator, and titrate with 0.1N hydrochloric acid to a pink end point. Run a blank. Calculate the percent by weight alkalinity as follows:

$$\text{Percent alkalinity (as CaO)} = \frac{7.01\ A(B-C)}{W}$$

where: A = Normality of the hydrochloric acid,
B = Milliliters of hydrochloric acid used to titrate the specimen,
C = Milliliters of hydrochloric acid used to titrate the blank, and
W = Weight of specimen in grams.

4.2.4.8 Free carbon. Transfer approximately 0.5 g of the specimen, weighed to the nearest 0.1 mg, to a combustion boat. Introduce the boat into a combustion tube and displace the air with a rapid stream of chlorine that has been dried by bubbling through concentrated sulfuric acid. Heat the furnace gently until the material ignites and continue heating until the material ceases to glow. Allow the tube to cool and withdraw the boat. Transfer the boat to a beaker and extract the residue with 1 to 1 hydrochloric acid to dissolve the iron and calcium compounds. Filter the solution through a weighed filter crucible and wash well with water. Dry the crucible for 3 hours at 100° to 105°C, cool in a desiccator, and weigh to the nearest 0.1 mg. Ignite the crucible at low red heat, cool in a desiccator, and reweigh. Calculate the percent by weight free carbon as follows:

$$\text{Percent free carbon} = \frac{100A}{W}$$

where: A = Loss in weight during the second ignition, in grams, and
W = Weight of specimen in grams.

4.2.4.9 Carbides and phosphides.

(a) Packed absorption tube. Impregnate absorbent cotton with lead acetate solution, and impregnate asbestos with potassium bisulfate solution, and dry both materials. Pack an absorption tube successively with the impregnated cotton and asbestos.

(b) Procedure. Dry a 300-mL flask fitted with a gas inlet tube, a dropping funnel, a mercury sealed stirrer, and a reflux condenser. Connect the packed absorption tube prepared in (a) to the outlet of the reflux condenser. Connect the other end of the absorption tube to three gas bubblers connected in series, each of which contains 25 mL of 0.1N silver nitrate solution. Transfer 10 g of the specimen to the flask. Pass a slow stream of nitrogen through the apparatus until all of the air has been displaced. Add 50 mL of water through the dropping funnel and start the stirrer. Heat on the bath for 2 hours, regulating the flow of nitrogen to provide approximately two bubbles of gas per second in the absorbing bubblers. At the end of the 2-hour period, disconnect the bubblers and filter the silver nitrate solution through Whatman No. 4 filter paper. Titrate the filtrate with 0.1N sodium hydroxide solution to the first permanent turbidity. If more than 2.0 mL of 0.1N sodium hydroxide solution are required, the specimen fails the test.

4.2.4.10 Particle size characteristics. Select and weigh the required sieves (see table II) conforming to ASTM E11, and a bottom pan. Nest the sieves in order of increasing fineness on the bottom pan. Weigh 100 g of the specimen to the nearest 0.1 g, transfer to the first (coarest) sieve, and cover the assembly. Shake for 15 minutes by means of a mechanical shaker geared to produce 300 $\pm$ 15 gyrations and 150 $\pm$ 10 taps of the striker per minute. Brush the sieves lightly at 5-minute intervals. Weigh the quantity retained on each sieve and calculate the percent material passing or retained, as applicable.

4.2.4.11 Apparent density (type 1 only). Weigh to the nearest 0.01 g approximately 20 g of the specimen and transfer to a stoppered glass cylinder approximately 6 inches high, with 0.8-inch internal diameter, and graduated in divisions of 0.5 mL. Drop the cylinder vertically 30 times from a height of 2.5 inches, permitting the base to strike against a hard leather pad. (Avoid warming the cylinder by contact with the hands as this may affect the accuracy of the results.) Level off the surface of the sample with a minimum of tapping on the side of the cylinder. Note the volume occupied by the sample. Calculate the apparent density as follows:

$$\text{Apparent density} = \frac{A}{B}$$

where: A = Weight of specimen, in grams, and
B = Volume occupied by specimen, in milliliters.

4.2.5 Container leakage test. Place the container in each of the following positions, and leave it in each for a period of 15 minutes:

(a) Upright
(b) Upside down
(c) On one side (or one quadrant)
(d) On one end (or second quadrant)
(e) On other side (or fourth quadrant)

Examine the container after each period for any evidence of leakage.

5. PACKAGING

5.1 Unit packing. Calcium silicide shall be unit packed level A or C as specified (see 6.2) in accordance with Department of Transportation (DOT) regulations.

5.1.1 Level A. Calcium silicide shall be unit packed level A in a 100- or 200-pound (lb) quantity as specified (see 6.2).

5.1.1.1 One-hundred lb quantity. A quantity of 100 (+1 or -0) lb of calcium silicide shall be unit packed in a nominal 12-gallon (gal) capacity steel pail conforming to DOT specification 17C, 17H, or 37A fitted with a polyethylene bag liner. The pail shall be finished as specified in PPP-P-704. The bag liner shall be closed by heat sealing, tying, or knotting, and the pail shall be closed by bolted locking ring. There shall be no evidence of leakage of contents when tested as specified in 4.2.5.

5.1.1.2 Two-hundred lb quantity. A quantity of 200 (+2 or -0) lb of calcium silicide shall be unit packed in a nominal 25-gal capacity drum in the same manner as specified for the 100-lb quantity in 5.1.1.1.

5.1.2 Level C. A 100- or 200-lb quantity as specified (see 6.2) of calcium silicide shall be unit packed level C in a steel container in accordance with DOT and othter applicable regulations, and in a manner to assure maintenance of specified quantity and purity from supply source to first destination, and for a minimum period of six months. Containers shall be acceptable to common carrier and shall be in accordance with Uniform Freight Classification Rules and National Motor Freight Classification Rules.

5.2 Packing. Calcium silicide unit packed as specified in 5.1, shall require no further protection for shipment other than unitization.

5.3 Unitization. Uniform quantities of containers of calcium silicide shall be palletized in accordance with load type III of MIL-STD-147 using the softwood pallet conforming to type IV of NN-P-71.

5.4 Marking. Containers and pallet loads of calcium silicide shall be marked in accordance with MIL-STD-129, DOT regulations, and any other applicable regulations. Each container shall also be marked with the following precautionary information:

WARNING: DANGEROUS WHEN WET

Store in a cool dry place.
Contact with moisture generates flammable hydrogen gas.
Prevent contamination with acid or acid fumes.

6. NOTES

6.1 Intended use. Type I calcium silicide is intended for use in starter pellets. Type II calcium silicide is intended for use in smoke, primer, and tracer compositions.

6.2 Ordering data. Acquisition documents should specify the following:

(a) Title, number, and date of this specification,
(b) Type of calcium silicide required (see 1.2),
(c) Level of unit packing required (see 5.1), and
(d) Quantity of calcium silicide required for level A and level C unit packs (see 5.1.1 and 5.1.2).

6.3 Batch. A batch is defined as that quantity of material which has been manufactured by some unit chemical process or subjected to some physical mixing operation intended to make the final product substantially uniform.

6.4 Significant places. For the purposed of determining conformance with this specification, an observed or calculated value should be rounded off "to the nearest unit" in the last right-hand place of figures used in expressing the limiting value, in accordance with the rounding-off method of ASTM E29.

6.5 Sampling and testing precautions. This specification covers inspection and use of chemical material which is potentially hazardous to personnel. Calcium silicide is dangerous when wet. Hydrofluoric acid, asbestos, and chlorine should be handled with utmost caution. All applicable safety rules, regulations, and procedures must be followed in the handling and processing of this material.

6.6 Regulatory coverage. The packaging requirements specified herein are based on regulations current at the time of specification preparation. Because regulations may be changed, it is recommended that the applicable regulations be reviewed at the time of calcium silicide packaging.

Custodians:

Army - EA
Navy - OS

Review activities:

Army - MD, AR
DLA - GS

User activity:

Navy - MC

Preparing activity:

Army - EA

Project No. 6810-B393

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions – Reverse Side)

1. DOCUMENT NUMBER	2. DOCUMENT TITLE
MIL-C-324C	CALCIUM SILICIDE, TECHNICAL

3a. NAME OF SUBMITTING ORGANIZATION	4. TYPE OF ORGANIZATION *(Mark one)*
	☐ VENDOR
b. ADDRESS *(Street, City, State, ZIP Code)*	☐ USER
	☐ MANUFACTURER
	☐ OTHER *(Specify)*:

5. PROBLEM AREAS

a. Paragraph Number and Wording:

b. Recommended Wording:

c. Reason/Rationale for Recommendation:

6. REMARKS

7a. NAME OF SUBMITTER *(Last, First, MI)* – Optional	b. WORK TELEPHONE NUMBER *(Include Area Code)* – Optional
c. MAILING ADDRESS *(Street, City, State, ZIP Code)* – Optional	8. DATE OF SUBMISSION *(YYMMDD)*

DD FORM 82 MAR 1426

EDITION OF 1 OCT 78 IS OBSOLETE

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NOTE: This form may not be used to request copies of documents, nor to request waivers, deviations, or clarification of specification requirements on current contracts. Comments submitted on this form do not constitute or imply authorizati to waive any portion of the referenced document(s) or to amend contractual requirements.

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