

Calcium Carbide Storage
Oxy-fuel gas
Welding and cutting
4-22-13

(15) Storing of calcium carbide

(a) Packaging of calcium carbide must: 253(g)(1)

(A) Be in containers that are: 253(g)(1)(i)

(i) Constructed from metal having sufficient strength to prevent rupture.
253(g)(1)(i)

(ii) Equipped with a screw top or equivalent. 253(g)(1)(i)

(iii) Constructed to be water-and-air-tight. 253(g)(1)(i)

(iv) Soldered in a manner that the package will not fail if exposed to fire.
253(g)(1)(i)

(B) Ensure that the packages are conspicuously marked “Calcium Carbide – Dangerous If Not Kept Dry” or with equivalent warning. 253(g)(1)(ii)

(C) Make known this **caution**: “Metal tools, even the so-called spark resistant type may cause ignition of an acetylene and air mixture when opening carbide containers”. 253(g)(1)(iii) .

(b) When storing calcium carbide indoors you must:

(A) Store in dry, waterproof, well-ventilated locations when quantities of 600 pounds or less are being stored. 253(g)(2)(i)

(B) Keep packages of calcium carbide sealed, except one of each size may be open. 253(g)(2)(i)(B)

(C) Store calcium carbide exceeding 600 pounds (272.2 kg) but not exceeding 5,000 pounds (2,268 kg): 253(g)(2)(ii)

(i) In accordance with paragraph (b)(D)(i), (ii), (I) thru (III) of this section;

(ii) In an inside generator room or outside generator house; or

(iii) In a separate room in a one-story building which may contain other occupancies, but without cellar or basement beneath the carbide storage

section. Such rooms shall be constructed in accordance with paragraphs (d)(H)(i) thru (iii) and (d)(I)(i) and (ii) of this section and ventilated in accordance with paragraph (d)(J) of this section. These rooms shall be used for no other purpose.

(D) Store calcium carbide in excess of 5,000 pounds (2,268 kg) in: 253(g)(2)(iii)

(i) An outside generator houses, or

(ii) A one story buildings without cellar or basement and used for no other purpose

(I) If the storage building is of noncombustible construction, it may adjoin other one-story buildings if they are separated by unpierced firewalls;

(II) If the storage building is detached and less than 10 feet (3 m) from a building or buildings, there must not be an opening in any of the mutually exposing sides of such buildings within 10 feet (3 m).

(III) If the storage building is of combustible construction, it must be at least 30 feet (9.1 m) from any other building exceeding two stories.

(c) When storing calcium carbide indoors you must not:

(A) Store more than 600 pounds of calcium carbide in the same room with fuel-gas cylinders. 253(g)(2)(i)(a)

(B) Break the seals when there is carbide in excess of 1 pound (0.5 kg) in any other unsealed package of the same size of carbide in the room. 253(g)(2)(i)(B)

(C) Store in rooms with sprinkler systems. 253(g)(1)(iv)

(d) When storing calcium carbide outdoors you must:

(A) Examine carbide containers to make sure they are in good condition. 253(g)(3)(ii)

(B) Place the bottom tier of each row on wooden planking or equivalent so containers will not contact the ground or ground water. 253(g)(3)(iii)

(C) Periodically re-examine carbide containers for rusting or other damage that might affect its water or air tightness. 253(g)(3)(ii)

(D) Ensure the carbide containers that are stored the longest are used first. 253(g)(3)(iv)

(E) Only store in unopened air and water tight metal containers.253(g)(3)(i)