



Sacramento Metropolitan Fire District

Community Risk Reduction Division

www.metrofire.ca.gov

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MAGNESIUM CHECKLIST

California Fire Code Chapter 59 Section 5906

Scope

An operational permit is required to melt, cast, heat treat or grind more than 10 pounds of magnesium.

Conditions:

- Storage piles greater than 50 cubic foot are separated from other piles, combustibles or items in combustible containers by aisle widths equal to pile height. (CFC 5906.2.1)
- Storage greater than 1,000 cubic feet are separated into 1,000 cubic foot piles and separated by aisle widths equal to pile height. (CFC 5906.2.2)
- Storage piles greater than 1,000 cubic foot are not located in nonsprinklered Type III, IV or V buildings.
- Storage in non sprinklered Type III, IV or V buildings are not in combustible containers and are separated from other combustibles by 30 feet. (CFC 5906.2.3)
- Storage piles in foundries and processing plants do not exceed 1,250 cubic feet and piles are separated by aisle widths equal to ½ pile height. (CFC 5906.2.4)
- Indoor storage of magnesium pigs, ingots and billets is less than 500,000 pounds, is located on noncombustible floors and piles are separated by aisle widths equal to ½ pile height. (CFC 5906.3.1)
- Outdoor storage of magnesium pigs, ingots and billets is less than 1,000,000 pounds, piles are separated by aisle widths equal to ½ pile height and piles are separated from combustibles and buildings by aisle widths equal to pile height. (CFC 5906.3.2)
- Magnesium fines are separated from combustibles. (CFC 5906.4.1)
- 50-1,000 cubic foot magnesium scrap storage is separated from other occupancies by 50 feet or rated construction. (CFC 5906.4.2)
- Magnesium scrap storage in excess of 1,000 cubic feet is separated from buildings by 100 feet. (CFC 5906.4.3)
- Floors at melting pots are of noncombustible construction. (CFC 5906.5.1)

- Dust collection hood or enclosure connected to a liquid-precipitation type of separator is provided at each magnesium grinding, buffing and wire-brush machine. (CFC 5906.5.3)
- Dust collection ducts are grounded and without bends. (CFC 5906.5.3.1)
- Dust collection interlock is provided and maintained. (CFC 5906.5.4)
- Class II, Division 1, electrical and electrical equipment is provided at dust collection machine. (CFC 5906.5.5)
- Magnesium processing equipment is grounded. (CFC 5906.5.6)
- Class D fire extinguisher is provided within 75 feet of operation or magnesium extinguishing material in container with scoop is provided within 30 feet of operation. (CFC 5906.5.7)
- Magnesium chips, turning and fine scrap is collected and kept in vented steel container. (CFC 5906.5.8)

Additional Requirements may apply.