

OFGO STUDIO

MAGNET SAFETY

Neodymium magnets are extremely strong and forceful, and the powerful attraction between them can be unexpected. To ensure that you handle these magnets safely and avoid harm to yourself and the magnets, please familiarize yourself with the following guidelines.

Guidelines for handling neodymium magnets safely:

- Wear equipment to protect eyes and hands (if needed) when using magnets.
- Be carefully attentive when you are handling or separating magnets.
- Separate magnets by grasping the outer magnet, sliding it off the stack, and quickly pulling it away.
- Prevent magnets from jumping together by working on a metal table or surface, so that magnets stay where they are placed.
- Keep your hands far apart if you are holding magnets in both hands.
- Do not use drills or machinery on neodymium magnets.
- To reduce pain or damage to pinched skin, apply ice immediately. Larger magnets can result in more serious injuries.
- Get medical attention immediately for any severe injuries.
- If handled and maintained correctly, neodymium magnets will sustain their quality and magnetic ability for decades.

Neodymium magnets can cause serious damage by jumping together and pinching the skin.

Neodymium magnets will jump and crash together from inches or even feet apart. A finger that is left in the way may get badly pinched or broken.

Neodymium magnets are fragile and may crack and break.

Since neodymium magnets are so fragile, if allowed to crash together (even within a few inches) they will peel, chip, crack, or shatter. Although they are made of metal, they are not as hard as one might think. As shattered magnets can speedily shoot out small pieces of sharp metal into the air, eye protection is recommended.

Neodymium magnets must be kept away from children.

Neodymium magnets are not to be handled or used as toys as children. Small magnets may present a choking hazard. If numerous magnets are ingested, they may stick together through the intestinal wall and cause severe injuries or death.



Neodymium magnets must be kept away from individuals with a pacemaker.

The strong magnetic fields around neodymium magnets may disrupt pacemakers, ICDs, and other implanted medical devices. Many such devices are wired to deactivate the device in a magnetic field.

Neodymium magnets should not be placed near magnetic media.

Neodymium magnets create strong magnetic fields that can tamper with magnetic media. Some such examples are magnetic ID cards, credit cards, floppy disks, cassette tapes, video tapes, older televisions, VCRs, computer monitors, and CRT displays.

Neodymium magnets must be kept away from GPS devices and smartphones.

The magnetic fields in neodymium magnets can disrupt compasses or magnetometers that are utilized for navigation of air and sea transport. The compasses of smartphones and GPS devices may also be affected.

Individuals with a nickel allergy should not touch neodymium magnets.

A small percentage of people may be allergic to some varieties of metal including nickel. The allergy is commonly identifiable as redness and a skin rash. Someone with a nickel allergy should wear gloves or take care not to handle nickel-plated neodymium magnets directly.

High temperatures may cause neodymium magnets to lose their magnetic properties.

While magnets are generally effective in temperatures of up to 80°C or 175°F, the grade, shape, and application of the magnet may cause variations.

Dust and powder from neodymium magnets are flammable.

Do not drill or use machinery on neodymium magnets, as the dust or powder that results is extremely flammable.

Neodymium magnets may corrode in certain environments.

As neodymium magnets are not waterproof, they can rust or deteriorate due to moisture. If put in water, outdoors, or in a moist environment, they can suffer damage and loss of magnetic strength.

