Safety information for AlNiCo magnets

The information for the safe handling of neodymium magnets, ferrite magnets, AlNiCo magnets and SmCo magnets can be found at: https://www.supermagnete.ro/safety

Danger



Swallowing

Children could swallow small magnets.

If several magnets are swallowed, they could get stuck in the intestine and cause perilous complications.

Magnets are not toys! Make sure that children don't play with magnets.



Electrical conductivity

Magnets are made of metal and conduct electricity.

Children might try to put magnets into a power outlet and thereby suffer from an electric shock.

Magnets are not toys! Make sure that children don't play with magnets.

Warning



Contusions

Big magnets have a very strong attractive force.

- Unsafe handling could cause jamming of fingers or skin in between magnets. This may lead to contusions and bruises.
- Powerful, very large magnets could cause bone fractures.

Wear heavy protective gloves when handling larger magnets.

Warning



Pacemaker

Magnets could affect the functioning of pacemakers and implanted heart defibrillators.

- A pacemaker could switch into test mode and cause illness.
- A heart defibrillator may stop working.
- If you wear these devices keep sufficient distance to magnets: www.supermagnete.ro/faq/distance
- Warn others who wear these devices from getting too close to magnets.

Warning



Heavy objects

Too heavy loads, symptoms of fatigue as well as material defect could cause a magnet or magnetic hook to loosen from the surface that is was attached to.

Falling objects could lead to serious injuries.

- The indicated adhesive force applies only to ideal conditions. Allow for a high safety cushion.
- Don't use magnets in places where people could sustain injuries in case of material failure.

Warning



Metal splinters

AlNiCo magnets are less brittle than neodymium magnets and therefore less fragile. However, if two magnets collide at high speed, there is still a risk that they will shatter.

Sharp splinters could be catapulted away for several meters and injure your eyes.

- Avoid the collision of magnets.
- Wear safety glasses when handling larger magnets.
- Make sure that nearby people are also protected or keep their distance.

Caution



Magnetic field

Magnets produce a far-reaching, strong magnetic field. They could damage TVs and laptops, computer hard drives, credit and ATM cards, data storage media, mechanical watches, hearing aids and speakers.

- Keep magnets away from devices and objects that could be damaged by strong magnetic fields.
- Please refer to our table of recommended distances: www.supermagnete.ro/fag/distance

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Caution



Combustibility

When machining AlNiCo magnets, the drilling dust could easily ignite.

Stay away from machining magnets or use appropriate tools and sufficient cooling water.

Caution





AlNiCo magnets consist of an alloy of the main components aluminium (Al), nickel (Ni) and cobalt (Co).

- Some people have an allergic reaction when they come into contact with nickel.
- Nickel allergies could develop from perpetual contact with nickel-plated objects.
- Avoid perpetual skin contact with magnets.
- Avoid contact with magnets if you already have a nickel allergy.

Caution

Airfreight



Magnetic fields of improperly packaged magnets could influence airplane navigation devices. In the worst case it could lead to an accident.

- Airfreight magnets only in packaging with sufficient magnetic shielding.
- Please refer to the respective regulations: www.supermagnete.ro/faq/airfreight

Caution

Postage



Magnetic fields of improperly packaged magnets could cause disturbances in sorting machines and damage fragile goods in other packages.

- Please refer to our shipping tips: www.supermagnete.ro/faq/shipping
- Use a large box and place the magnet in the middle surrounded by lots of padding material.
- Arrange magnets in a package in a way that the magnetic fields neutralise each other. • If necessary, use sheet iron to shield the magnetic field.
- There are stricter rules for airfreight: Refer to the warning notice "Airfreight".

Notice



Demagnetisation through neodymium magnets

Stronger neodymium magnets can reverse the polarity or demagnetise AlNiCo magnets.

Keep AlNiCo magnets at least 5 cm away from neodymium magnets and do not mix the two types of magnets.

Notice

Temperature resistance



AlNiCo magnets can be used at temperatures from -270°C to 500°C.

At lower and higher temperatures they lose part of their adhesive force permanently.

Do not use AlNiCo magnets in places where they are exposed to temperatures below -270°C or above 500°C

Notice

Mechanical treatment



AlNiCo magnets are brittle. When drilling or sawing a magnet with improper tools, the magnet may break.

Stay away from mechanical treatment of magnets if you do not possess the necessary equipment and experience.

Notice



Influence on people



According to the current level of knowledge, magnetic fields of permanent magnets do not have a measurable positive or negative influence on people. It is unlikely that permanent magnets constitute a health risk, but it cannot be ruled out

- For your own safety, avoid constant contact with magnets.
- Store large magnets at least one metre away from your body.