

PRODUCT DESCRIPTION

Cathodic protection is a widely used method for protecting metallic structures against corrosion, and aluminum sacrificial anodes (ASA™) are a popular solution. These anodes are connected to the metal structure and immersed in an electrolyte. When the electrolyte comes into contact with the metal structure, the corrosion process begins. However, by connecting an aluminum sacrificial anode (ASA™) to the metal structure, the aluminum, which has a higher corrosion potential, replaces the original metal and protects it. Aluminum sacrificial anodes (ASA™) are commonly used in various corrosion environments, including freshwater and saltwater. They are highly resistant to most electrolytes present in corrosive environments and are capable of efficiently protecting metal structures against corrosion. As a result, they are very effective in protecting marine structures such as ships and submarines, oil and gas pipelines, storage tanks, building structures and bridges, transportation infrastructure, and industrial equipment.



Aluminum Sacrificial Anodes - ASA™

PRODUCT FEATURES

- Long service life
- Tolerant to salty water
- Tolerant to fresh water
- High durability
- High electrochemical capacity
- High protective output current
- Uniform and visible erosion
- Easy installation or implementation
- Superior environmental compatibility
- Cost-effective
- Lightweight

Chemical Compounds

Element	Standard (%)
Zinc	2.5 – 5.75
Indium	0.014 - 0.040
Silicon	0.12 max
Iron	0.09 max
Copper	0.003 max
Cadmium	0.002 max
Aluminum	remaining

Capacity specifications

Electrochemical specifications	In seawater conditions
Electrochemical capacity (A.h/kg)	2500
Open circuit potential (V)	1.1
Operation (%)	90

PRODUCT USES

Aluminum sacrificial anodes (ASA™) offer an effective and economical solution for preventing metal corrosion. They are commonly used for the following applications:

- Water heaters
- Above-ground tanks
- Underground tanks
- Refineries
- Pipelines
- Seaports
- Water structures such as offshore platforms
- Oil rigs

HOW TO USE

SURFACE PREPARATION

Before installing aluminum sacrificial anodes, the surface of the structure must be thoroughly cleaned with various cleaning tools such as wire brushes, grinders, etc., to remove any impurities such as grease, dust, etc.

APPLICATION:

Aluminum sacrificial anodes (ASA™) can be installed or executed using various methods, which are described below:

- **welded connections:** In this method, the aluminum sacrificial anode comes pre-equipped with a core made of ordinary metal, which is used to weld the anode to a structure for installation.
- **bolted connections:** Some aluminum sacrificial anodes have suitable holes or cavities on their surface for bolted connections, allowing them to be installed using bolted connections.
- **bracelet connections:** Aluminum sacrificial anodes are sometimes made in the form of a bracelet for applications such as pipelines. Installation of the aluminum sacrificial anode bracelet involves placing the anode around the pipeline like a bracelet and connecting the two ends together.

LIMITATIONS:

- Aluminum sacrificial anodes should never be coated with paint.
- Consumable insert or reinforcement in the aluminum sacrificial anode should be made of ordinary metal.

PACKAGING

Aluminum sacrificial anodes are packaged in fabric bags or perforated containers, depending on the customer's request.

FIRST AID

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water; contact physician immediately. For respiratory problems, remove to fresh air. Wash clothing before reuse.

DISCLAIMER OF LIABILITY

AFZIR, LLC warrants its products to be free from manufacturing defects. Buyer determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to replacement of product. Any claim for breach of this warranty must be brought within six months of the date of purchase.

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