KANTHAL®

ALKROTHAL®
SAFETY INFORMATION SHEET

数据表

This Safety Information Sheet provides essential health, safety, and environmental information for Alkrothal®, a ferritic iron-chromium-aluminum (FeCrAl) alloy known for its exceptional high-temperature resistance and oxidation properties. The information herein is intended to assist users in the safe handling, storage, processing, and disposal of Alkrothal® in various industrial and manufacturing applications. While Alkrothal® is considered stable under normal conditions, appropriate precautions should always be taken to minimize risks during its use. This document is not a substitute for regulatory compliance or a Material Datasheet, but complements it by offering additional safety guidance specific to this material.

IDENTIFICATION OF THE SUBSTANCE/PREPATATION AND THE COMPANY/UNDERTAKING

Trade name: Alkrothal® 3, 14, 720

Product type: Resistance Heating Alloy

Manufacturer/Supplier:
Kanthal AB
Box 502
734 27 Hallstahammar
+46 220-210 00

E-mail: ehs@kanthal.com

Emergency telephone: Use your local emergency number

HAZARDS IDENTIFICATION

Symbol: -

R-value: -

Injurious to health properties: Chromium might cause contact eczema

COMPOSITION/INFORMATION ON INGREDIENTS

Compounds	EINECS-no.	CAS-no.	Content %	H-value
Iron	231-096-4	7439-89-6	Balance	

Chromium	231-157-5	7440-47-3	12-16
Auminum	231-072-3	7429-90-5	Max 4

FIRST AID MEASURES

Inhalation: Move to fresh air.

Skin contact: Wash with soap and water.

Eye contact: Rinse inmediatly with water for several minutes, with eyelids held open.

Ingestion: Not a normal route of exposure.

FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use suitable extinguishing media for surrounding materials and type of fire.

Extinguishing media which shall not be used for safety reasons: None known.

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases: None known.

Special protective equipment for firefighters: Wear fully protective impervious suit.

ACCIDENTAL RELEASE MEASURES

Personal precautions: Use protective clothing and gloves. Also see p.8

Environmental precautions: -

Methods for cleaning up: -

HANDLING AND STORAGE

Handling: Follow generally accepted industrial practice for good hygiene.

Storage: Keep dry.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values

Hygiene standards and exposure limits may differ from country to country. Check those currently applying in your country and comply with regulations. Examples of exposure limit applying Sweden are given below:

Compound	Exposure limit	Type of value
Chromium	0,5 mg//m3	NGV (Total)
Aluminum	2 mg/m3 5 mg/m3	NGV (Respirable) NGV (Total)

NGV= Level Limit Value, sanitary limit value for exposure during one working day.

Exposure controls

Preventive action: Good general ventilation is recommended.

Respiratory protection: Use when necessary.

Hand protection: Protective gloves, avoid skin contact.

Eye protection: Wear safety glasses when tooling.

Skin protection: Wear suitable protective clothing and protective shoes.

PHYSICAL AND CHEMICAL PROPERTIES

Form: Solid, metal

Colour: Metallic

Odour: Odourless

Density: ≈ 7 g/cm3

Melting point (approx.): ~1,500°C (~2,730°F)

Water solubility: Insoluble

STABILITY AND REACTIVITY

Conditions to avoid: -

Materials to avoid: -

Hazardous decomposition products: -

TOXICOLOGICAL INFORMATION

Inhalation: Dust may cause sensitive persons problem with respiration.

Skin contact: May cause contact eczema and allergy when repeatedly skin contact.

Eye contact: Product dust may cause temporary mechanical eye irritation.

Ingestion: Not a normal route of exposure.

Chromium
Prolonged contact with chromium compounds or with materials containing chromium can cause allergic reactions. Based on research, it is believed that this only occurs with contact with chromium (VI). Allergic skin reactions are particularly common in work places where work involves the handling of chromates, dichromates and chromic acid fumes, but chromium allergies have also been observed in housewives, cement workers, furriers and joiners (National Chemicals Inspectorate, Sweden, 1995). One type of contact eczema, 'cement eczema', is thought to be caused by chromium (VI) in cement.

People who have developed chromium allergies also tend to be hypersensitive to other metals, mainly nickel and cobalt (National Chemicals Inspectorate, Sweden, 1995).

ECOLOGICAL INFORMATION

No data available.

DISPOSAL CONSIDERATIONS

Disposal in accordance with all applicable local and national regulations.

TRANSPORT INFORMATION

Road transport (ADR): Not classified dangerous in the meanint of transport regulations.

REGULATORY INFORMATION

Symbol: -

H-value: -

P-value: -

OTHER INFORMATION

Information in this Safety Information Sheet is based on the form the product is released on the market.

List of relevant H phrases: -

Declaration

The information given in this safety information sheet is based on the present level of our knowledge and experience. The data sheet describes the products with respect to safety requirements. The data given is not intended as a confirmation of product properties and does not constitute a legal contractual relationship, nor should it be used as the basis for ordering these products.

Revision: Revised in accordance with CPL regulation. EC1272/2008