

1 Identification of the substance/mixture/product and of the company

Product identifier Brand Code 8432

Trade name: **ANKERHARTH NN25**

Application of the substance / the mixture Refractory product

Details of the supplier of the safety data sheet

Manufacturer/Supplier: RHI AG
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Information department: E-Mail: msds@rhi-ag.com
Tel: +43 502135361

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2 Hazard(s) identification

Information concerning particular hazards for human and environment: not applicable

Hazard pictograms



GHS05

Signal word Danger

Hazard-determining components of labeling: calcium oxide
Hazard statements H318 Causes serious eye damage.

Precautionary statements P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a poison center/doctor.

Classification system

NFPA ratings (scale 0-4)



Health = 1
Fire = 0
Reactivity = 0

HMIS Classification



Health = 1
Fire = 0
Reactivity = 0

Carcinogenicity:
Other hazards

not listed

See section 11.

Safety Data Sheet

Printing date 05/25/2015

Reviewed on 05/25/2015

Trade name: ANKERHARTH NN25

(Contd. of page 1)

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Unshaped product for refractory use on basis of

Dangerous components:

1309-48-4	magnesium oxide		60-100%
1305-78-8	calcium oxide	Xi R41 Eye Dam. 1, H318	5-7%

Additional information

The product contains lime in different bound forms (calcium ferrite, calcium silicate, etc.) or immobilized as the magnesia raw material. The lime is not present in the free form and is therefore not classified as dangerous.

4 First-aid measures

Description of first aid measures

After inhalation Supply fresh air; consult doctor in case of complaints.
After skin contact Immediately wash with water and soap and rinse thoroughly.
After eye contact Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing If symptoms persist consult doctor.

Information for doctor / Note to physicians

Most important symptoms and effects, both acute and delayed: No further relevant information available.

Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures

Extinguishing media

For safety reasons unsuitable extinguishing agents Not applicable, the product is fire resistant.

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

Protective equipment / Protection of firefighters: No special measures required.

Hazardous combustion products Will not occur.

Flammable properties The product is fire resistant.
Not flammable.

Additional information: Additional information see section 9.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8.

Environmental precautions: See section 12.

Methods and material for containment and cleaning up: Ensure adequate ventilation.

Reference to other sections See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

(Contd. on page 3)

USA

Safety Data Sheet

Printing date 05/25/2015

Reviewed on 05/25/2015

Trade name: ANKERHARTH NN25

See Section 13 for disposal information.

(Contd. of page 2)

7 Handling and storage

Handling

Precautions for safe handling Prevent formation of dust.

Information about protection

against explosions and fires: The product is not flammable.

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles:

No special requirements.

Information about storage in one common storage facility:

Not applicable.

Further information about storage conditions:

Keep receptacle tightly sealed.

Specific end use(s)

No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems:

No further data; see item 7.

Control parameters

Exposure Guidelines (Components with limit values that require monitoring at the workplace):

1309-48-4 magnesium oxide

PEL Long-term value: 15* mg/m³
fume; *total particulate

TLV Long-term value: 10* mg/m³
*as inhalable fraction

1305-78-8 calcium oxide

PEL Long-term value: 5 mg/m³

REL Long-term value: 2 mg/m³

TLV Long-term value: 2 mg/m³

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment (PPE)

General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

Respiratory protection / Breathing equipment:

NIOSH approved respirators should be used if dust is present. A respiratory protection program should be implemented if exposure exceeds OSHA PELs.

Respiratory protection



Filter P100

Protection of hands:

Leather gloves
Protective gloves

(Contd. on page 4)

USA

Safety Data Sheet

Printing date 05/25/2015

Reviewed on 05/25/2015

Trade name: ANKERHARTH NN25

Eye/face protection:

Safety glasses with side shields

(Contd. of page 3)



Safety glasses

Skin protection:

Protective work clothing.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form (Physical state):

Solid

Color:

Dark

Odor:

Odorless

Odor threshold:

Not determined.

pH-value:

Not applicable.

Melting point / Melting range:

2802 °C (5076 °F)

Flash point:

Not applicable.

Flammability (solid, gaseous)

Product is not flammable.
See section 5.

Ignition temperature:

Not applicable.

Decomposition temperature:

Not applicable.

Auto igniting:

Product is not self igniting.

Danger of explosion:

Product does not present an explosion hazard.

Explosion limits:

Lower:

Not applicable.

Upper:

Not applicable.

Vapor pressure:

Not applicable.

Relative density

Not applicable.

Vapour density

Not applicable.

Evaporation rate

Not applicable.

Solubility in / Miscibility with

Not applicable.

Water:

Insoluble.

Partition coefficient (n-octanol/water): Not applicable.

Viscosity:

Not applicable.

dynamic:

Not applicable.

kinematic:

Not applicable.

Other information

No further relevant information available.

Additional information

Melting Point: NA
 Freezing Point: NA
 Viscosity (and units): NA
 Odor Threshold (ppm): NA
 Evaporation Rate (relative to): NA
 Vapor Density (air =1): NA
 Vapor Pressure (units): NA
 pH (undiluted): NA
 pH (diluted): NA
 % dilution: NA
 VOC Content: NA
 % Volatile: NA
 PM Content: NA

USA

(Contd. on page 5)

Safety Data Sheet

Printing date 05/25/2015

Reviewed on 05/25/2015

Trade name: ANKERHARTH NN25

(Contd. of page 4)

* 10 Stability and reactivity

Reactivity

Chemical stability

Conditions to avoid

(Thermal decomposition): No decomposition if used and stored according to specifications.

Possibility of hazardous reactions

No dangerous reactions known

Conditions to avoid

No further relevant information available.

Hazardous decomposition products:

No dangerous decomposition products known

* 11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are

relevant for classification: Not applicable.

Primary irritant effect:

on the skin:

Irritant to skin and mucous membranes.

May cause dryness and irritation

on the eye:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Allergic reaction:

No known allergic reaction.

Additional toxicological information:

Irritant

If this product has been in service at temperatures greater than 1000°C (1800°F) it may contain cristobalite, a form of crystalline silica.

IARC has classified crystalline silica, which includes cristobalite, as a group I carcinogen (known human carcinogen).

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

NTP (National Toxicology Program)

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

* 12 Ecological information

Toxicity

Aquatic toxicity:

No further relevant information available.

Persistence and degradability

No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential

No further relevant information available.

Mobility in soil

No further relevant information available.

Additional ecological information:

General notes:

Do not allow large quantities of undiluted product to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT:

Not applicable.

vPvB:

Not applicable.

Other adverse effects

No further relevant information available.

USA

(Contd. on page 6)

Safety Data Sheet

Printing date 05/25/2015

Reviewed on 05/25/2015

Trade name: ANKERHARTH NN25

(Contd. of page 5)

* 13 Disposal considerations

**Waste treatment methods
Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:
Recommendation:**

Disposal must be made according to official regulations.

* 14 Transport information

UN-Number

DOT, ADR, ADN, IMDG, IATA

not applicable

UN proper shipping name

DOT, ADR, ADN, IMDG, IATA

not applicable

Transport hazard class(es)DOT, ADR, ADN, IMDG, IATA
Class

not applicable

Packing group

DOT, ADR, IMDG, IATA

not applicable

Environmental hazards:

Not applicable.

Special precautions for user

Not applicable.

Danger code (Kemler):

Not applicable.

**Transport in bulk according to Annex II of
MARPOL73/78 and the IBC Code**

Not applicable.

Transport/Additional information:

Not dangerous according to available informations.

UN "Model Regulation":

-

* 15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture**TSCA (Toxic Substances Control Act):**

All ingredients are listed.

Proposition 65**Chemicals known to cause cancer:**

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

WHMIS

D2B - Toxic material causing other toxic effects

Carcinogenity categories**EPA (Environmental Protection Agency)**

None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)

1309-48-4 magnesium oxide

A4

MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

(Contd. on page 7)

USA

Safety Data Sheet

Printing date 05/25/2015

Reviewed on 05/25/2015

Trade name: ANKERHARTH NN25

(Contd. of page 6)

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS05

Signal word

Danger

Hazard-determining

components of labeling:

calcium oxide

Hazard statements

H318 Causes serious eye damage.

Precautionary statements

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310

Immediately call a poison center/doctor.

National regulations:

SARA 313 TOXIC CHEMICALS

No material listed in the components in Section 3 of this MSDS is on the SARA 313 list.

SARA 302 EXTREMELY HAZARDOUS SUBSTANCES

No material listed in the components in Section 3 of this MSDS is on the SARA 302 list.

TSCA (Toxic
Substances Control
Act)

This substance or all the ingredients of this product are on the Chemical Substances Inventory of the Toxic Substances Control Act (TSCA Inventory). The presence on this list does not require any legal reporting

HMIS Classification

Class D - Division 2 - Subdivision B

Untested mixture containing a toxic material

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all information required by the CPR.

Water hazard class:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:

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05/25/2015 / 77

Abbreviations and acronyms:

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

* Data compared to the
previous version altered.