

SAFETY DATA SHEET

in accordance with Regulation (EC) no. 1907/2006 (REACH)

MIXTURE OF ALUMINIUM OXIDE POWDER - NICKEL POWDER



Date of Issue: 22-08-2022

Date of Revision:

Powder Number: LPP.K-32

Version: 2.0

SECTION 1: Identification of The Substance or Mixture and The Company/Undertaking

1.1. Product identification

Product type:	Mixture
Product code:	LPP.K-32

1.2. Relevant identified use of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Specific industrial/professional use	Industrial For professional use only
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1.2.2. Uses advised against

No additional information available

1.3. Details regarding the supplier of the safety data sheet

Titomic Limited

info@titomic.com

www.titomic.com

1.4. Emergency telephone number

Country	Organisation / Company	Address	Emergency tel. number
THE NETHERLANDS	National Poisons Information Center (NVIC) University Medical Centre (UMC) Utrecht, The National Poisons Information Centre (NVIC) provides information for doctors, veterinary surgeons, pharmacists and other medical professionals about the potential health effects and treatment options in cases of poisoning. The NVIC can be reached 24 hours a day, both by telephone and Internet.	P.O. Box 85500 3508 GA Utrecht	+31 30 274 88 88

SECTION 2: Hazard Identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) no. 1272/2008 [CLP]

Skin Sens. 1 H317
Carc. 2 H351
STOT RE 1 H372
Aquatic Chronic 3 H412
For total text of H phrases: see section 16

Harmful physical-chemical, health and environmental effects

No additional information available

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2.2. Label elements

Labelling according to Regulation (EC) no. 1272/2008 [CLP]

Hazard pictograms (CLP):	  GHS07 GHS08
Signal word (CLP):	Hazard
Hazardous elements:	Nickel powder
Hazard indication (CLP):	H317 - Can cause an allergic skin reaction H351 - Thought to be carcinogenic (on inhalation, on contact with skin) H372 - Long term or repeated exposure causes damage to organs H412 - Poisonous to aquatic organisms, with long-term consequences
Safety recommendations (CLP):	P201 - Consult special instructions before use P202 - Use only after you have read and understood all safety instructions P260 - do not inhale substance P264 - Wash hands, lower arms and face after working with this product. P270 - Do not eat, drink or smoke during use van this product P272 - Soiled clothing may not be removed from the area.
EUH phrases:	EUH208 - contains nickel powder (7440-02-0). Can cause allergic reactions

2.3. Other hazards

No additional information available.

SECTION 3: Composition of And Information About Ingredients

3.1. Substances

Not applicable

3.2. Mixture

Name	Product identification	%	Classification as laid down in Directive 67/548/EEC
Nickel powder (99% pure)	(CAS no.) 7440-02-0 (EG no) 231-111-4 (EU Identification number) 028-002-00-7	55-59	Carc.Cat.3; R40 T; R48/23 R43
Aluminium oxide powder (99.4% pure)	(CAS no.) 1344-28-1 (EC no.) 215-691-6 (REACH no.) 01-2119529248-35	41-45	Not classified

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3.2. Mixture			
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Nickel powder (99% pure)	(CAS no.) 7440-02-0 (EG no) 231-111-4 (EU Identification number) 028-002-00-7	55-59	Skin Sens. 1, H317 Carc. 2, H351 STOT RE 1, H372 Aquatic Chronic 3, H412
Aluminium oxide powder (99.4% pure)	(CAS no.) 1344-28-1 (EC no.) 215-691-6 (REACH no.) 01-2119529248-35	41-45	Not classified

For total content of R and H phrases: see section 16

SECTION 4: First Aid Measures

4.1. Description of first aid measures

General first aid:	Never give anything by mouth to an unconscious person. If a person feels unwell, consult a physician (show the relevant label if possible).
First aid following substance inhalation:	Allow victim to breathe fresh air. Allow victim to rest. Seek medical assistance if any adverse effects develop.
First aid following contact with skin:	Remove soiled clothing and wash or shower skin with plenty of water (for 15 minutes). Consult a physician if necessary. Wash with plenty of soap and water. Consult a physician. Wash soiled clothing before reusing.
First aid following contact with eyes:	Rinse immediately with plenty of water. Lift eyelids using fingers and flush the eyes with plenty of water. Seek medical assistance if pain or redness persists.
First aid following ingestion:	Rinse the mouth thoroughly with water. Give victim water to drink. Consult a physician immediately. Induce vomiting if the victim is conscious.

4.2. Main acute and delayed symptoms and effects

Symptoms/injuries following inhalation:	Inhalation may cause allergy or asthma symptoms or breathing difficulties. Irritation of the airways. Shortness of breath. Coughing.
Symptoms/injuries following contact with skin:	Can cause allergic reactions Skin irritation.
Symptoms/injuries following contact with eyes:	May cause eye irritation.

4.3. Reporting the necessary immediate medical care and special treatment

No additional information available

Section 5: Firefighting Measures

5.1. Extinguishing media

Suitable extinguishing media:	Foam. Dry powder, sand.
Unsuitable extinguishing media:	Do not use extinguishing media containing water.

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5.2. Special hazards arising from the substance or mixture

Fire hazard:	Not flammable.
Explosion hazard:	No immediate explosion hazard.

5.3. Advice for firefighters

Extinguishing instructions:	Cool the exposed vessels by spraying with water or water mist. Exercise extreme caution when fighting a chemical fire. Avoid discharging fire extinguishing water into the environment.
Protection during firefighting:	Do not enter fire zone without suitable safety equipment/clothing, including protective breathing apparatus.

SECTION 6: Measures to Be Taken in The Event of Accidental Release of The Substance Or Mixture

6.1. Personal prevention measures, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures:	Evacuate personnel to a safe place.
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6.1.2. For emergency personnel

Protective equipment:	Provide cleaning personnel with suitable protection.
Emergency procedures:	Ventilate the area.

6.2. Environmental precautions

Do not discharge into sewage or public waters. If pollution of lakes, rivers or sewage occurs, inform the responsible authorities in accordance with local regulations. Avoid discharge into the environment.

6.3. Methods and materials for containment and cleaning

Cleaning methods:	Sweep or scrape from the ground into suitable containers. Keep dust formation to a minimum. Store separately from other materials.
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6.4. Reference to other sections

See section 13 for waste disposal after cleaning. See section 8 for use of personal protection equipment.

SECTION 7: Handling And Storage

7.1. Precautions for safe handling of the substance or mixture

Additional hazards associated with handling:	Make sure there is adequate ventilation. Avoid creating dust. Avoid contact with skin and eyes. Do not inhale the substance. Do not swallow. If swallowed, seek medical attention immediately.
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7.1. Precautions for safe handling of the substance or mixture

Precautions for safe handling of the substance or mixture:	Wash hands and other exposed parts using gentle soap and water before eating, drinking, smoking or leaving the work environment. Make sure there is adequate ventilation in the handling area in order to prevent evaporation. Consult special instructions before use P202 - Use only after you have read and understood all safety instructions
Hygienic measures:	P272 - Soiled clothing may not be removed from the area. Wash soiled clothing before reusing. Do not eat, drink or smoke when using this product.

7.2. Safe storage conditions, including incompatible products

Storage conditions:	Keep containers closed when not in use. Store in a cool, dry, well-ventilated area.
Incompatible substances:	Strong alkalines. Strong acids.
Incompatible substances:	Avoid contact with air.

7.3. Specific end use(s)


industrial.

SECTION 8: Measures to Control Exposure/Personal Protection

8.1. Control parameters

No additional information available

8.2. Measures to control exposure

Suitable technical measures:	Emergency eye baths and safety showers should be installed in the vicinity of all exposure hazard areas. Provide the area with local drainage/outlet or general ventilation. Do not exceed exposure limits (VLE/MAC).
Personal protective equipment:	Avoid unnecessary exposure. Wear suitable protective clothing. Wear mask in presence of dust. Gloves. Safety goggles. 
Hand protection:	The manufacturer can provide the exact penetration time; bear this in mind at all times. Select glove material according to penetration times, rates of diffusion and the degradation. As a result of failed tests, no recommendation for glove material can be given for the product/ the preparation/ the chemical mixture. Standard EN 374 - Gloves for protection against chemicals. The choice of suitable gloves depends not only on the material, but also on other quality characteristics, and varies from one manufacturer to another.
Eye protection:	Safety goggles.
Protection for the skin and body:	Use suitable safety clothing/equipment.
Respiratory protection:	If exposure to airborne dust concentrations is prolonged, wear a respirator that meets European or national requirements.
Other information:	Do not eat, drink or smoke during use.

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SECTION 9: Physical and Chemical Properties

9.1. Information about basic physical and chemical properties

Physical state:	Solid
Colour:	Grey.
Odour:	Odourless.
Odour threshold:	No data available
pH:	No data available
Relative evaporation rate (butyl acetate=1):	No data available
Melting point:	No data available
Coagulation/freezing point:	No data available
Boiling point:	No data available
Flash point:	No data available
Auto-ignition temperature:	No data available
Thermolysis temperature:	No data available
Flammability (solid, gas):	Not flammable
Vapour pressure:	No data available
Relative vapour density at 20 °C:	No data available
Relative density:	No data available
Solubility:	Product soluble in water.
Log Pow:	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	No data available
Explosive properties:	No data available
Oxidising properties:	No data available
Explosion points	No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and Reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable at room temperature and with normal use.

10.3. Potentially hazardous reactions

Not classified

10.4. Conditions to avoid

Store and use away from heat, sparks, open flame or any other ignition source.

10.5. Chemically incompatible materials

Avoid contact with combustible materials, acids, oxidizing agents, halogenated hydrocarbons.

10.6. Hazardous decomposition products

Flammable hydrogen gas may be released on contact with metallic substances.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity:	Not classified
Mixture of Aluminium oxide powder - Nickel powder	
LD50 oral rat	> 9000 mg/kg
nickel powder (7440-02-0)	
LD50 oral rat	> 9000 mg/kg (Rat; Experimental value, Rat; Experimental value)
Skin corrosion/irritation:	Not classified Classification criteria are not met based on available data
Serious eye damage/irritation:	Not classified Classification criteria are not met based on available data
Respiratory or skin sensitisation:	Can cause allergic reactions
Germ cell mutagenicity:	Not classified Classification criteria are not met based on available data
Carcinogenicity:	Thought to be carcinogenic (on inhalation, on contact with skin)
Reproduction toxicity:	Not classified Classification criteria are not met based on available data
STOT-single exposure:	Not classified Classification criteria are not met based on available data

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11.1. Information on toxicological effects

STOT-repeated exposure:	H372 - Long term or repeated exposure causes damage to organs
Inhalation hazard:	Not classified Classification criteria are not met based on available data
Potential hazardous effects on human health and potential symptoms:	Potential hazardous effects on human health and potential symptoms

SECTION 12: Ecological Information

12.1. Toxicity

Nickel powder (7440-02-0)	
EC50 Daphnia 1	0.013 mg/l (48 h; Ceriodaphnia dubia; Nikkelion)

12.2. Persistence and degradability

Mixture of Aluminium oxide powder - Nickel powder	
Persistence and degradability	Not classified
Aluminium oxide powder (1344-28-1)	
Persistence and degradability	Not classified

12.3. Bioaccumulation

Mixture of Aluminium oxide powder - Nickel powder	
Bioaccumulation	Not classified
Aluminium oxide powder (1344-28-1)	
Bioaccumulation	Not classified

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and zPzB assessments

No additional information available

12.6. Other adverse effects

Avoid discharge into the environment

SECTION 13: Disposal Instructions

13.1. Waste treatment methods

Recommendations for waste disposal:	Dispose of safely and in accordance with local/national regulations. P501 - Dispose of content/packaging at a recognised waste disposal centre
Ecology - waste products:	Avoid discharge into the environment.

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SECTION 14: Transport Information

In accordance with ADR/ RID / IMDG/ IATA regulations.

14.1. UN number	
UN no.:	Not regulated
UN no. (IATA):	Not regulated
UN no. (IMDG):	Not regulated
UN no. (ADN):	Not regulated

14.2. Correct shipping name in accordance with the UN Model Regulations
Not applicable

14.3. Transport hazards class	
Class (VN):	-
Classification code (VN):	-
Class (IATA):	-
Class (IMDG):	-
Class (ADN)	-

14.4. Packing group
Packing group (UN)

14.5. Environmental hazards	
Other information:	No additional information available

14.6. Special precautions for the user	
Transport within the users premises:	always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable

SECTION 15: Regulations

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture	
15.1.1. EU regulations	
No limitations in accordance with Annex XVII of REACH Do not contain REACH substance candidate list	
15.1.2. National regulations	
No additional information available	

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15.2. Chemical safety evaluation

No chemical safety evaluation has been conducted.

SECTION 16: Other Information

Sources of data:	EC Regulation no. 1272/2008 OF THE EUROPEAN PARLIAMENT AND THE COUNCIL OF 16 December 2008 re. the classification, labelling and packing of substances and mixtures as amended and repealed in Regulation 67/548/EEC and 1999/45/EC and as amended in EC Regulation no. 1907/2006.
Other information:	REACH Declaration: All information is based on current knowledge. Consistency of the information listed in this Safety Data Sheet with the information in the Chemical Safety Report is considered to the extent available at the time of compilation (see version number and date of revision). EXCLUSION OF LIABILITY The information provided in this sheet has been gathered from sources which, to the best of our knowledge, are reliable. However, the information was provided without any express or implied regarding its correctness. Conditions regarding the handling, storage, use or disposal of the product fall beyond the scope of our control and also possibly beyond the scope of our knowledge. For this and other reasons, we shall not assume any responsibility for, and expressly disclaim liability for, any loss, damage or expense whatsoever resulting from the handling, storage, use or disposal of the product.

For total content of R, H and EUH phrases:

Aquatic Chronic 3	Chronic danger for the aquatic environment, Category 3
Carc. 2	Carcinogenicity, Category 2
Skin Sens. 1	Skin sensitivity, Category 1
STOT RE 1	Specific target organ toxicity on repeated exposure, Category 1
H317	Can cause allergic reactions
H351	Thought to be carcinogenic
H372	Long term or repeated exposure causes damage to organs
H412	Poisonous to aquatic organisms, with long-term consequences
R40	Possible carcinogenic effects
R43	Can cause hypersensitivity reactions following contact with skin
R48/23	Toxic; danger of serious damage to health as a result of prolonged exposure through inhalation
R52/53	Harmful to aquatic organisms; can have long-term adverse effects on the aquatic environment.
T	Toxic

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purpose of the health, safety and environmental aspects of its use. It should therefore not be regarded as a guarantee for any specific property of the product.