SECTION 1: Identification of the product and company

Product identifier	NIMH1208P
Product	Rechargeable nickel-metal hydride battery pack
Contained battery	NIMH1208P
Rating per battery	12 V | 800 mAh | 9.6 Wh (calculated)

Scope: chemical information describes the battery, not the complete luminaire. Use in compatible equipment with suitable NiMH charging electronics and in accordance with the product and equipment instructions.

Supplier: RP-Technik GmbH, Hermann-Staudinger-Str. 10-16, 63110 Rodgau, Germany.
Telephone: +49 (6106) 660 28 - 0. Email: product@rp-group.com | info@rp-group.com. Contact: Francisco Goerke.
Emergency: 112 within the EU for acute medical emergencies or fire. Following exposure, seek medical advice or contact a poison centre. Supplier contact is for product information.

SECTION 2: Hazards identification

The intact battery is a sealed article; its ingredients remain enclosed during intended use. This does not imply that released contents are harmless. Damage, reversed polarity, short circuit, overcharging, fire or excessive heat can cause leakage, rupture and fire. Alkaline contents may injure skin, eyes and the respiratory tract. Do not use or charge leaking or unusually hot batteries. Insulate terminals; do not open or throw into fire.

SECTION 3: Composition / information on ingredients

The ranges describe NiMH cells in general and are not a formulation analysis of the assembled pack. Assembly materials are not quantified separately. Ingredients are inaccessible when cells remain intact.

Ingredient	CAS number	Mass fraction
Nickel(II) hydroxide	12054-48-7	15-22 %
Iron	7439-89-6	16-20 %
Nickel	7440-02-0	30-40 %
Manganese	7439-96-5	0.3-1.5 %
Lanthanum	7439-91-0	1.7-4.5 %
Cobalt	7440-48-4	1.5-2.5 %
Potassium hydroxide	1310-58-3	1-2 %
Polyethylene	9002-88-4	0-0.6 %
Cerium	7440-45-1	0.29-0.9 %
Neodymium	7440-00-8	0-1 %
Aluminium	7429-90-5	0-1 %
Sodium hydroxide	1310-73-2	1-2 %
Lithium hydroxide	1310-65-2	0.1-0.5 %
Polytetrafluoroethylene (PTFE)	9002-84-0	0-0.1 %
Sodium carboxymethyl cellulose	9004-32-4	0-0.1 %
Polypropylene	9003-07-0	1-3 %
Styrene-butadiene polymer	9003-55-8	0.1-0.5 %
Cobalt(II) hydroxide	21041-93-0	0.5-2 %
Zinc hydroxide	20427-58-1	0-0.1 %
Water	7732-18-5	0.15-0.23 %

Section 3 - composition (continued)

Ingredient	CAS number	Mass fraction
Yttrium	7440-65-5	0-1.5 %
Praseodymium	7440-10-0	0-0.5 %
Zirconium	7440-67-7	0-1 %
Samarium	7440-19-9	0-1 %
Ytterbium	7440-64-4	0-0.5 %
Magnesium	7439-95-4	0-1 %
Titanium	7440-32-6	0-1 %
Carbon	7440-44-0	0-1 %
Polyamide 66	32131-17-2	0-1 %
Xanthan gum	11138-66-2	0-0.1 %
Polyacrylic acid	9003-01-4	0-0.1 %
Sodium polyacrylate	9003-04-7	0-0.1 %
Hydroxyethyl cellulose	9004-62-0	0-0.1 %
Hydroxypropyl methylcellulose	9004-65-3	0-0.1 %
Bitumen	8052-42-4	0-0.1 %
Titanium dioxide	13463-67-7	0-0.1 %

SECTION 4: First aid measures

Eyes: Immediately rinse with plenty of water for several minutes, holding eyelids open. Obtain medical attention.
Skin: Remove contaminated clothing and shoes. Wash thoroughly with water and soap and rinse; seek medical advice for irritation.
Inhalation: Move to fresh air without endangering the responder. Obtain immediate medical assistance for breathing difficulties; assisted breathing only by trained responders.
Ingestion: Do not induce vomiting. Obtain medical attention immediately.
4.2/4.3: Released alkaline contents may irritate or cause chemical burns. Report exposure circumstances and provide this sheet. No further specific treatment information is available.

SECTION 5: Firefighting measures

Select extinguishing measures for the surrounding fire; dry chemical and CO2 are suitable. No specific unsuitable media are listed. Batteries may burst and release hazardous decomposition products in fire. Damaged or overcharged cells may burn and ignite adjacent batteries. Responders require self-contained breathing apparatus and full protective clothing. Avoid smoke and isolate the affected area.

SECTION 6: Accidental release measures

Keep unprotected persons away, ventilate, remove ignition sources and use protective equipment. Prevent entry into drains, soil or water. Collect solids with minimal dust and released contents in suitable resistant containers for disposal. Avoid contact. Do not handle hot or burning batteries. See sections 8 and 13.

SECTION 7: Handling and storage

Do not open, dismantle, crush or short circuit. Observe correct polarity and use suitable chargers. Protect against damage and heat. Wash hands after handling damaged batteries. Store cool, dry and well ventilated; avoid direct sunlight, sparks, flames and hot surfaces. Protect terminals from conductive objects. Follow product-specific storage and temperature limits. End use: section 1.

SECTION 8: Exposure controls / personal protection

No intended exposure to ingredients occurs with intact cells. After release, apply local occupational limits to the substances actually present; US limits in underlying safety information do not replace local risk assessment. For leakage, wear chemical-resistant gloves, goggles and protective clothing. Provide ventilation and select respiratory protection for the exposure. Significant releases or fire require self-contained breathing apparatus. Remove contaminated clothing.

SECTION 9: Physical and chemical properties

Property	Information
Form	Solid article containing assembled cylindrical NiMH cells
Odour	Odourless when intact
Battery rating	12 V | 0.8 Ah | 9.6 Wh (calculated)
pH, boiling point, vapour pressure, viscosity	Not applicable to the sealed article
Other properties	No product-specific measurements available

Damage may release alkaline contents.

SECTION 10: Stability and reactivity

Stable during intended use; no additional product-specific reactivity data. Avoid fire, sparks, heat, short circuit and mechanical damage. Avoid contact with oxidising agents, acids and bases. Carbon monoxide, carbon dioxide and lithium oxide fumes are listed as possible decomposition products. Do not inhale fire gases or released ingredients.

SECTION 11: Toxicological information

No quantitative toxicological test data are available for the complete pack. Ingredient data are not measurements of the whole article. Exposure from opened or leaking cells may occur by skin/eye contact, inhalation or ingestion; particularly avoid alkaline contents. No further product-specific data are available.

SECTION 12: Ecological information

No quantitative product data are available for ecotoxicity, degradation, bioaccumulation, mobility in soil, PBT/vPvB or endocrine effects. Prevent environmental release.

SECTION 13: Disposal considerations

Collect batteries separately for suitable recycling. Do not place in household waste or incinerate. Protect terminals against short circuit. Dispose of leaking batteries and contaminated materials under local rules and inform the waste contractor of their condition.

SECTION 14: Transport information

Transport mode	Classification / conditions
Road / rail (ADR/RID)	NiMH batteries are not subject to ADR/RID; no dangerous-goods class or packing group for this entry.
Air transport	If special provision A199 is met: Not Restricted. Prevent short circuit and unintended activation. If an air waybill is issued, state: Not Restricted, as per Special Provision A199.
Sea transport (IMDG 42-24)	UN 3496, BATTERIES, NICKEL-METAL HYDRIDE; class 9, no packing group. Special provision 963 distinguishes the shipping cases below.

Sea transport - SP 963: Packed with or contained in equipment: exempt from IMDG provisions. Separately shipped batteries: securely pack and protect against short circuit. Below 100 kg total gross mass of such cells/batteries per cargo transport unit, no further IMDG provisions apply. At 100 kg or more, 5.4.1, 5.4.3 and the stowage/handling and segregation provisions in dangerous-goods list columns 16a/16b also apply. The threshold concerns the combined battery load, not one battery.

14.5/14.6: Not identified as a marine pollutant in the underlying safety information. Effectively insulate terminals, protect against movement and damage and prevent unintended equipment activation. Relief depends on the shipping arrangement and its conditions. Assess damaged, leaking or waste batteries separately and observe carrier requirements.
14.7 Bulk sea transport: Not intended for this assembled product. UN38.3 lithium testing does not apply to this NiMH chemistry.

SECTION 15: Regulatory information

Safety information for a sealed battery article using the 16-section format. Apply battery, occupational safety, waste and transport requirements according to use and destination. A chemical safety assessment of the article is not part of this document.

SECTION 16: Other information

Revision 1.2 / 14.10.2026. Product-specific identification, RP-GROUP design and German/English counterparts. Chemical data concern the contained NIMH1208P battery. Product instructions and the actual shipping arrangement remain applicable.

NiMH: nickel-metal hydride; SDS: safety data sheet; CAS: Chemical Abstracts Service; ADR/RID: road/rail dangerous goods rules; IATA: International Air Transport Association; IMDG: International Maritime Dangerous Goods Code; PBT/vPvB: persistent, bioaccumulative and toxic / very persistent and very bioaccumulative.