



SAFETY DATA SHEET

MATERION

1. Product and company identification

Product name Nickel Phosphide (Ni₂P)
Manufacturer/Supplier Materion Advanced Chemicals Inc.
Address 407 N. 13th Street
1316 W. St. Paul Avenue
Milwaukee, WI 53233
United States
Telephone 414.212.0257
e-mail advancedmaterials@materion.com
Contact person Noreen Atkinson
Emergency telephone number

Recommended use and Limitations on use

Recommended use Not available.
SDS number N-MSDS0072

2. Hazards identification

GHS classification

Physical hazards Not classified.
Health hazards Sensitization, skin Category 1
Carcinogenicity (inhalation) Category 1A
Specific target organ toxicity following repeated exposure Category 1
Environmental hazards Hazardous to the aquatic environment, acute hazard Category 1
Hazardous to the aquatic environment, long-term hazard Category 1

Label elements

Symbols None.
Signal word None.
Hazard statement None.

3. Composition/information on ingredients

Substance or mixture Substance

| Chemical property | CAS Number | Concentration (%) |
|-------------------|------------|-------------------|
| Nickel Phosphide | 12035-64-2 | 100 |

4. First aid measures

Inhalation Not available.
Skin contact Not available.
Eye contact Not available.
Ingestion Not available.
Potential delayed effects Not available.
Personal protection for first-aid responders Not available.
Notes to physician Not available.

5. Fire-fighting measures

Extinguishing media Not available.
Extinguishing media to avoid None.
HAZCHEM Code Number None.

| | |
|--|----------------|
| Specific hazards during fire fighting | None. |
| Special fire fighting procedures | Not available. |
| Protection of fire-fighters | Not available. |
| Hazards from combustion products | None. |

6. Accidental release measures

| | |
|--|----------------|
| Personal precautions, protective equipment and emergency procedures | Not available. |
| Environmental precautions | Not available. |
| Spill cleanup methods | Not available. |

7. Handling and storage

Handling

| | |
|---|----------------|
| Precautions | Not available. |
| Safe handling advice | Not available. |
| Prevention of fire and explosion | Not available. |

Storage

| | |
|------------------------------------|----------------|
| Suitable storage conditions | Not available. |
| Incompatible materials | Not available. |

8. Exposure controls/personal protection

Exposure limits

New Zealand. WES. (Workplace Exposure Standards)

| Material | Type | Value |
|-----------------------------------|------|-----------------------|
| Nickel Phosphide (CAS 12035-64-2) | TWA | 0.1 mg/m ³ |

US. ACGIH Threshold Limit Values

| Material | Type | Value | Form |
|-----------------------------------|------|-----------------------|---------------------|
| Nickel Phosphide (CAS 12035-64-2) | TWA | 0.2 mg/m ³ | Inhalable fraction. |

Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

| Material | Type | Value |
|-----------------------------------|------|-----------------------|
| Nickel Phosphide (CAS 12035-64-2) | TWA | 0.1 mg/m ³ |

Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

| Material | Type | Value |
|-----------------------------------|------|-----------------------|
| Nickel Phosphide (CAS 12035-64-2) | TWA | 0.1 mg/m ³ |

Biological limit values No biological exposure limits noted for the ingredient(s).

Engineering controls

Personal protective equipment

| | |
|---------------------------------------|----------------|
| Respiratory protection | Not available. |
| Skin protection | Not available. |
| Eye/face protection | Not available. |
| Radioactive or thermal hazards | Not available. |
| Hygiene measures | Not available. |

9. Physical and chemical properties

Appearance

| | |
|-----------------------|----------------|
| Physical state | Solid. |
| Form | Not available. |

| | |
|--|-------------------|
| Colour | Not available. |
| Odour | Not applicable. |
| Odour threshold | Not available. |
| pH | Not available. |
| Melting point/freezing point | Not available. |
| Boiling point, initial boiling point, and boiling range | Not available. |
| Flash point | Not available. |
| Auto-ignition temperature | Not available. |
| Flammability (solid, gas) | Not applicable. |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Explosive limit - lower (%) | Not available. |
| Explosive limit – upper (%) | Not available. |
| Vapour pressure | Not available. |
| Vapour density | Not available. |
| Evaporation rate | Not available. |
| Relative density | Not available. |
| Density | Not available. |
| Solubility(ies) | |
| Solubility (water) | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Decomposition temperature | Not available. |
| Other data | |
| Molecular formula | Ni ₂ P |

10. Stability and reactivity

| | |
|---|-------|
| Stability | None. |
| Conditions to avoid | None. |
| Incompatible materials | None. |
| Hazardous decomposition products | None. |
| Possibility of hazardous reactions | None. |

11. Toxicological information

| | |
|---|----------------|
| Acute toxicity | Not available. |
| Information on likely routes of exposure | |
| Ingestion | Not available. |
| Inhalation | Not available. |
| Skin contact | Not available. |
| Eye contact | Not available. |
| Routes of exposure | Not available. |
| Symptoms | Not available. |
| Skin corrosion/irritation | Not available. |
| Serious eye damage/eye irritation | Not available. |
| Skin sensitiser | Not available. |
| Carcinogenicity | |

IARC Monographs. Overall Evaluation of Carcinogenicity

Nickel Phosphide (CAS 12035-64-2)

1 Carcinogenic to humans.

| | |
|------------------------|----------------|
| Chronic effects | Not available. |
|------------------------|----------------|

Relevant negative data Not available.

12. Ecological information

Ecotoxicity Not available.

Persistence and degradability Not available.

Bioaccumulation Not available.

**Partition coefficient
n-octanol/water (log Kow)** Not available.

Bioconcentration factor (BCF) Not available.

Mobility Not available.

Other hazardous effects Not available.

13. Disposal considerations

**Disposal
methods/information** Not available.

Special precautions Not available.

14. Transport information

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

15. Regulatory information

16. Other information

References Not available.

Issued by
Not available.

Prepared by
Not available.

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