



# SAFETY DATA SHEET

**MATERION**

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Identification of the substance/preparation** Nickel Phosphide (Ni<sub>2</sub>P)  
**Version No.** 01  
**Issue date** 04-May-2015  
**CAS #** 12035-64-2  
**SDS Number** N-MSDS0072  
**Manufacturer information** Materion Advanced Chemicals Inc.  
407 N. 13th Street  
1316 W. St. Paul Avenue  
Milwaukee, WI 53233  
  
United States  
advancedmaterials@materion.com  
414.212.0257

## 2. HAZARDS IDENTIFICATION

**Classification** Carc. Cat. 1;R49, T;R48/23, R43, N;R50/53  
**Physical hazards** Not classified as a physical hazard.  
**Health hazards** May cause cancer by inhalation. Toxic: danger of serious damage to health by prolonged exposure through inhalation. May cause sensitisation by skin contact.  
**Environmental hazards** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS #	Percent	EC-No.	Classification
Nickel Phosphide	12035-64-2	100	234-828-0	Carc. Cat. 1;R49, T;R48/23, R43, N;R50/53

## 4. FIRST-AID MEASURES

## 5. FIRE-FIGHTING MEASURES

## 6. ACCIDENTAL RELEASE MEASURES

## 7. HANDLING AND STORAGE

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Material	Type	Value	Form
Nickel Phosphide (CAS 12035-64-2)	TWA	0,2 mg/m <sup>3</sup>	Inhalable fraction.

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

### Recommended monitoring procedures

**Additional exposure data** Not available.

### Personal protective equipment

**Skin and body protection** Not available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

**Physical state** Solid.  
**Form** Not available.  
**Colour** Not available.  
**Odour** Not applicable.

<b>Odour threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Boiling point</b>	Not available.
<b>Flash point</b>	Not available.
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Flammability limits in air, lower, % by volume</b>	Not available.
<b>Vapour pressure</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Vapour density</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>VOC</b>	Not available.
<b>Molecular formula</b>	Ni <sub>2</sub> P

## 10. STABILITY AND REACTIVITY

<b>Conditions to avoid</b>	Not available.
<b>Hazardous decomposition products</b>	Not available.

## 11. TOXICOLOGICAL INFORMATION

### Carcinogenicity

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Nickel Phosphide (CAS 12035-64-2)

1 Carcinogenic to humans.

## 12. ECOLOGICAL INFORMATION

## 13. DISPOSAL CONSIDERATIONS

## 14. TRANSPORT INFORMATION

### ADR

Not regulated as dangerous goods.

### 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

### Labeling

<b>Contains</b>	Nickel Phosphide
<b>EC number</b>	234-828-0
<b>Symbol(s)</b>	



Toxic



Dangerous for the environment

**R-phrase(s)**

R49 May cause cancer by inhalation.  
R43 May cause sensitisation by skin contact.  
R48/23 Toxic: danger of serious damage to health by prolonged exposure through inhalation.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S-phrase(s)**

S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).  
S53 Avoid exposure - obtain special instructions before use.  
S60 This material and its container must be disposed of as hazardous waste.  
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

**16. OTHER INFORMATION**

**Wording of the R-phrases in sections 2 and 3**

R43 May cause sensitisation by skin contact.  
R48/23 Toxic: danger of serious damage to health by prolonged exposure through inhalation.  
R49 May cause cancer by inhalation.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.