

Material Safety Data Sheet

According to 91/155/EC

Printing date 07.03.2001

Reviewed on 16.01.2001

1 Identification of substance

• Product details

• Trade name Sodium hypophosphite

• Stock number: 14104

• Manufacturer/Supplier:

Alfa Aesar, A Johnson Matthey Company
Johnson Matthey Catalog Company, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Emergency Phone: (978) 521-6300
CHEMTREC: (800) 424-9300
Web Site: www.alfa.com

• Informing department: Product safety department.

• Emergency information:

During normal hours the Health, Safety and Environmental Department. After normal hours call Chemtrec at (800) 424-9300.

2 Composition/Data on components:

• Chemical characterization:

Designation: (CAS#)

Sodium hypophosphite (CAS# 10039-56-2), 100%

• Identification number(s):

• EINECS Number: 231-669-9

3 Hazards identification

• Hazard designation: · void

• Information pertaining to particular dangers for man and environment

Not applicable

• **4 First aid measures**

• **After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
Seek immediate medical advice.

• **After skin contact**

Instantly wash with water and soap and rinse thoroughly.
Seek immediate medical advice.

• **After eye contact**

Rinse opened eye for several minutes under running water. Then consult doctor.

• **After swallowing** Seek medical treatment.

• **5 Fire fighting measures**

• **Suitable extinguishing agents**

CO₂, extinguishing powder or water jet. Fight larger fires with water jet.

• **Special hazards caused by the material, its products of combustion or**

flue gases:

Can be released in case of fire:

Hydrogen phosphide

• **Protective equipment:**

Wear self-contained breathing apparatus.

Wear full protective suit.

• **6 Accidental release measures**

• **Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

• **Measures for environmental protection:**

Do not allow material to be released to the environment without proper governmental permits.

• **Measures for cleaning/collecting:** Collect mechanically.

• **Additional information:**

See Section 7 for information on safe handling

See section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

7 Handling and storage

• **Handling**

• **Information for safe handling:**

Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.
No special precautions necessary if used correctly.

• **Information about protection against explosions and fires:**

No special measures required.

• **Storage**

• **Requirements to be met by storerooms and containers:**

No special requirements.

• **Information about storage in one common storage facility:**

Store away from oxidizing agents.

• **Further information about storage conditions:**

Protect from heat and direct sunlight.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

8 Exposure controls and personal protection

• **Components with critical values that require monitoring at the workplace:** _____

• **Additional information:** No data

• **Personal protective equipment**

• **General protective and hygienic measures**

The usual precautionary measures should be adhered to in handling the chemicals.

• **Eye protection:** Safety glasses

• **Body protection:** Protective work clothing.

9 Physical and chemical properties:

• **Form:** Powder

• **Colour:** White

• **Smell:** Odourless

Value/Range Unit Method

• **Change in condition**

• **Melting point/Melting range:** 248 ° C (dec)

• **Boiling point/Boiling range:** Not determined

• **Sublimation temperature / start:** Not determined

• **Flash point:** Not applicable

• **Inflammability (solid, gaseous)** Product is not inflammable.

• **Ignition temperature:** Not determined

• **Decomposition temperature:** Not determined

• **Danger of explosion:** Product is not explosive.

• **Critical values for explosion:**

• **Lower:** Not determined

• **Upper:** Not determined

• **Steam pressure:** Not determined

• **Density** Not determined

• **Solubility in / Miscibility with**

• **Water:** at 25 ° C 1000 g/l

• 10 Stability and reactivity

• **Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

• **Materials to be avoided:**

Oxidizing agents
Heat

• **Dangerous reactions:**

Toxic fumes may be released if heated above the decomposition point
Reacts with oxidizing agents

• **Dangerous products of decomposition:**

Phosphorus oxides (e.g. P2O5)
Hydrogen phosphide

• 11 Toxicological information

• **Acute toxicity:**

LD/LC50 values that are relevant for classification: _____

Oral: LD50: 7640 mg/kg (rat)

• **Primary irritant effect:**

• **on the skin:** Powder: irritant effect

• **on the eye:** Powder: irritant effect

• **Sensitization:** No sensitizing effect known.

• **Additional toxicological information:**

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

• 12 Ecological information:

• **General notes:**

Do not allow material to be released to the environment without proper governmental permits.

• 13 Disposal considerations

• **Product:**

• **Recommendation**

Consult state, local or national regulations for proper disposal.
Hand over to disposers of hazardous waste.
Must be specially treated under adherence to official regulations.

• **Uncleaned packagings:**

• **Recommendation:**

Disposal must be made according to official regulations.

• 14 Transport information

• **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**

• **ADR/RID-GGVS/E Class:** None

• **Maritime transport IMDG/GGVSea:**

• **IMDG/GGVSea Class:** None

• **Air transport ICAO-TI and IATA-DGR:**

• **ICAO/IATA Class:** None

• **Transport/Additional information:**

Not dangerous according to the above specifications.

• 15 Regulatory information

• **Designation according to EC guidelines:**

Observe the normal safety regulations when handling chemicals
The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV).

• **National regulations**

• **Information about limitation of use:**

For use only by technically qualified individuals.

• **16 Other information:**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

• **Department issuing data specification sheet:**

Health, Safety and Environmental Department.

• **Contact:** Darrell R. Sanders