

Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 08/19/2002

Reviewed on 10/19/1999

1 Identification of substance:**Product details:****Trade name:** Phenylsilane**Stock number:** 22939**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

Hongwei Yan

12/09/2002

Information department: Health, Safety and Environmental 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:****Description:** (CAS#)

Phenylsilane (CAS# 694-53-1), 100%

Identification number(s):**EINECS Number:** 211-772-5**3 Hazards identification****Hazard description:**

Xn Harmful

F Highly flammable

Information pertaining to particular dangers for man and environment

R 17 Spontaneously flammable in air.

R 22 Harmful if swallowed.

R 36/37/38 Irritating to eyes, respiratory system and skin.

4 First aid measures**After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm.

Seek immediate medical advice.

After skin contact

Immediately 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 a doctor.

After swallowing Seek immediate medical advice.

USA

(Contd. on page 2)

Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 08/19/2002

Reviewed on 10/19/1999

Trade name: Phenylsilane

(Contd. of page 1)

5 Fire fighting measures

Suitable extinguishing agents Extinguishing powder. Do not use water.
For safety reasons unsuitable extinguishing agents Water
Special hazards caused by the material, its products of combustion or resulting gases:
 Spontaneously flammable in air.
Protective equipment:
 Wear self-contained respirator.
 Wear fully protective impervious suit.

6 Accidental release measures

Person-related safety precautions:
 Wear protective equipment. Keep unprotected persons away.
 Ensure adequate ventilation
 Keep away from ignition sources
Measures for environmental protection:
 Do not allow material to be released to the environment without proper governmental permits.
Measures for cleaning/collecting:
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 Dispose contaminated material as waste according to item 13.
 Ensure adequate ventilation.
 Keep away from ignition sources.
Additional information:
 See Section 7 for information on safe handling
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

7 Handling and storage

Handling
Information for safe handling:
 Keep container tightly sealed.
 Store in cool, dry place in tightly closed containers.
 Ensure good ventilation at the workplace.
Information about protection against explosions and fires:
 Keep ignition sources away.
 Substance/product is self ignitable.
Storage
Requirements to be met by storerooms and receptacles:
 No special requirements.
Information about storage in one common storage facility:
 Store away from air.
 Store away from water/moisture.
 Store away from oxidizing agents.
 Do not store together with acids.
 Do not store together with alkalies (caustic solutions).
Further information about storage conditions:
 Keep container tightly sealed.
 Store in cool, dry conditions in well sealed containers.

USA

(Contd. on page 3)

Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 08/19/2002

Reviewed on 10/19/1999

Trade name: Phenylsilane

(Contd. of page 2)

8 Exposure controls and personal protection

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with limit values that require monitoring at the workplace:

Not required.

Additional information: No data

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Breathing equipment:

Use suitable respirator when high concentrations are present.

Protection of hands: Impervious gloves

Eye protection:

Safety glasses

Full face protection

Body protection: Protective work clothing.

9 Physical and chemical properties:

General Information

Form:	Liquid
Color:	Clear
	Colorless
Odor:	Aromatic

Change in condition

Melting point/Melting range:	Not determined
Boiling point/Boiling range:	120°C (248°F)
Sublimation temperature / start:	Not determined

Flash point:	Not applicable
	Not determined

Ignition temperature:	Not determined
-----------------------	----------------

Decomposition temperature:	Not determined
----------------------------	----------------

Auto igniting:	Spontaneously flammable in air.
----------------	---------------------------------

Explosion limits:

Lower:	Not determined
Upper:	Not determined

Vapor pressure:	Not determined
-----------------	----------------

Density at 20°C (68°F):	0.868 g/cm ³
-------------------------	-------------------------

(Contd. on page 4)

USA

Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 08/19/2002

Reviewed on 10/19/1999

Trade name: Phenylsilane

(Contd. of page 3)

Solubility in / Miscibility with**Water:**

Insoluble

Not determined

10 Stability and reactivity**Thermal decomposition / conditions to be avoided:**

Decomposition will not occur if used and stored according to specifications.

Materials to be avoided:

Air

Water/moisture

Acids

Bases

Oxidizing agents

Dangerous reactions Spontaneously flammable in air.**Dangerous products of decomposition:**

Carbon monoxide and carbon dioxide

Hydrogen

11 Toxicological information**Acute toxicity:****LD/LC50 values that are relevant for classification:**

Oral	LD50	700 mg/kg (mus)
Inhalative	LC50/2H	14500 mg/m3/2H (mus)

Primary irritant effect:**on the skin:** Irritant to skin and mucous membranes.**on the eye:** Irritating effect.**Sensitization:** No sensitizing effects known.**Subacute to chronic toxicity:**

Dizziness, fainting and vomiting are common symptoms associated with exposure to phenylsilane.

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 to ensure proper disposal.

(Contd. on page 5)

USA

Alfa Aesar
A Johnson Matthey Company**Alfa Aesar**
A Johnson Matthey Company**Alfa Aesar**
A Johnson Matthey Company

Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 08/19/2002

Reviewed on 10/19/1999

Trade name: Phenylsilane

(Contd. of page 4)

Uncleaned packagings:**Recommendation:**

Disposal must be made according to official regulations.

14 Transport information**DOT regulations:**

Hazard class:	4.2
Identification number:	UN2845
Packing group:	I
Proper shipping name (technical name):	Pyrophoric liquid, organic, n.o.s., phenylsilane

Land transport ADR/RID (cross-border)

ADR/RID class:	4.2 Substances liable to spontaneous combustion
Item:	6a
Danger code (Kemler):	333
UN-Number:	2845
Description of goods:	Pyrophoric liquid, organic, n.o.s., phenylsilane

Maritime transport IMDG:

IMDG Class:	4.2
UN Number:	2845
Packaging group:	I
Proper shipping name:	Pyrophoric liquid, organic, n.o.s., phenylsilane

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class:	4.2
UN/ID Number:	2845
Packaging group:	I

(Contd. on page 6)

USA

Material Safety Data Sheet
acc. to OSHA and ANSI

Printing date 08/19/2002

Reviewed on 10/19/1999

Trade name: Phenylsilane

(Contd. of page 5)

Proper shipping name: Pyrophoric liquid, organic, n.o.s.,
phenylsilane**15 Regulations****Product related hazard informations:****Hazard symbols:**

Xn Harmful

F Highly flammable

Risk phrases:

17 Spontaneously flammable in air.

22 Harmful if swallowed.

36/37/38 Irritating to eyes, respiratory system and skin.

Safety phrases:26 In case of contact with eyes, rinse immediately with plenty of
water and seek medical advice.

36 Wear suitable protective clothing.

National regulationsAll components of this product are listed in the U.S. Environmental
Protection Agency Toxic Substances Control Act Chemical Substance
Inventory.**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 MSDS: Health, Safety and Environmental Department.**Contact:** Darrell R. Sanders

USA