

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Tris(trimethylsilyl)phosphine

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

According to Regulation (EC) No1272/2008

Pyrophoric liquids (Category 1)

Skin irritation (Category 2)

Eye irritation (Category 2)

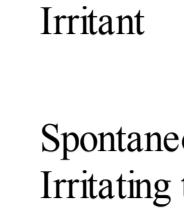
Specific target organ toxicity - single exposure (Category 3)

According to European Directive 67/548/EEC as amended.

Spontaneously flammable in air. Irritating to eyes, respiratory system and skin.

Label elements

Pictogram



Signal word : Danger

Hazard statement(s)

H250 Catches fire spontaneously if exposed to air.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statement(s)

P222 Do not allow contact with air.

P231 Handle under inert gas.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P422 Store contents under inert gas.

Hazard symbol(s)

F Highly flammable

Xi Irritant

R-phrase(s)

R17 Spontaneously flammable in air.

R36/37/38 Irritating to eyes, respiratory system and skin.

S-phrase(s)

S16 Keep away from sources of ignition - No smoking.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S27 Take off immediately all contaminated clothing.

S28 After contact with skin, wash immediately with plenty of soap and water.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C₉H₂₇PSi₃

Molecular Weight : 250,54 g/mol

CAS-No.	EC-No.	Classification	Concentration
15573-38-3	-	Pyr. Liq. 1; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H250, H315, H319, H335 F, Xi, R17 - R36/37/38	-

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: 2 - 8 °C

Handle and store under inert gas. Air and moisture sensitive.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Protective gloves against thermal risks

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Impervious clothing. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : liquid

Colour : colourless

Safety data

pH : no data available

Melting point : no data available

Boiling point : 243 - 244 °C - lit.

Flash point : no data available

Ignition temperature : no data available

Lower explosion limit : no data available

Upper explosion limit : no data available

Density : 0.863 g/cm³ at 25 °C

Water solubility : no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Reacts violently with water.

Conditions to avoid

Avoid moisture. Exposure to air.

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Oxides of phosphorus, silicon oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

GERM cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC or equal to 0.1% is identified as

probable, possible or confirmed human carcin