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13822-56-5 3-Aminopropyltrimethoxysilane

Synonym	3-Aminopropyltrimethoxysilane 3-Trimethoxysilylpropylamine γ-Aminopropyltrimethoxysilane
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↗ Show notes

CAS no.: 13822-56-5 Name: 3-Aminopropyltrimethoxysilane
Formula: C ₆ H ₁₇ NO ₃ Si
Release date: 02-05-2007
Modification Date: 05-07-2011



Fare

H318: Causes serious eye damage.

H315: Causes skin irritation.

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

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

"Caution - this substance has not yet been fully researched".

Long-term Exposure	Yes	Suspected	Conflicting Data	No Evidence/Information
Carcinogenic				X
Damage to Reproduction				X
Damage to Genetic Material (Mutagenic)				X
Cutaneous Disease e.g. Dermatitis				X
Inhalation Allergy e.g. Asthma				X
Damage to Nervous System				X
Damage to Organs: lung, liver, kidney				X
Other damages:				X

A : APPLICABILITY/REGULATORY INFORMATION

B : TOXICOLOGICAL INFORMATION

General :

- Very little is known about the effects of this substance.

Inhalation :

- No information available.

Inhalation-long :

- No information available.

Skin-acute :

- Causes skin irritation.

Skin-long :

- No information available.

Eyes :

- Causes severe irritation/ possibly corrosive. Causes serious damage.

Ingestion :

- No information available.

C : EXPOSURE PRECAUTIONS/PERSONAL PROTECTION**Precautions :**

- Ensure effective process ventilation e.g. fume cupboards, and if not possible, use a respiratory protective device with gas filter A and a particle filter. The choice of filter depends of the work (see Guide D.5.4.).
Filtering respiratory protective device must only be used 3 hours a day.
Use safety goggles.
- Use e.g. protective face shield and apron.
- It is not possible to find a suitable disposable glove according to the Quick Selection Guide to Chemical Protective Clothing (Fifth Edition). It is recommended to use disposal nitrile rubber gloves. The penetration time is not known, but is expected to be short. It is recommended that the gloves are to be renewed immediately in case of any spillage. Wash your hands thoroughly with soap and water before using new gloves.
- Emergency showers, eye wash bottles and sink with soap must be easily accessible.
- Flammable substance: never expose or store the substance near open flame.
- No information on the long-term effects of the substance. Arrangements must be made to avoid contact with the substance.
- The substance has a low vapour pressure and will only emit limited vapour. NB: Heating, spraying or other aerosol-generating work processes considerably increase the risk of inhalation.

D : DESCRIPTION OF THE SUBSTANCE**Description :**

- Alternative CAS no.: 12738-51-1, 86158-92-1, 107397-00-2, 876665-92-8, 1207727-80-7.

Incompatibility :

- Incompatible with a.o. strong oxidizing agents, acids, bases, alcohols, peroxides. May decompose on exposure to moist air or water.

Environmental conditions :

- No data has been found on the biodegradability of the substance and it must therefore be treated as not being readily biodegradable substance.
- Not considered to be bio-accumulating.

Description:	Colourless liquid	Vapour pressure:	0,27 mm Hg 25°C
State:		Relative evaporation rate:	
Molecular weight:	179,29 g/mol	Autoignition temperature:	294 °C
Density:	1,02 g/cm³	Ignition temperature:	
Water solubility:	15 g/L	Explosive Limit:	
Solubility:		Threshold Limit Value (TLV, mg/m³):	
Log Kow:	-1,16	Threshold Limit Value (TLV, ppm):	
pH:		Note according to AT (O,K,H,L,S):	
Melting point/freezing point:		Vapour Hazard Index (VHI/VHR):	
Boiling point:	194 °C	M-factor	

Flash point:

90-92 °C

E : FIRE FIGHTING MEASURES

Fire :

- Hazardous decomposition products e.g.
- carbon monoxide, nitrogen- and silicon oxides.

Extinguishing :

- Water spray, carbon dioxide, dry chemical powder.
- Be aware that dry chemical powder may damage your apparatus.

F : ACCIDENTAL SPILLS AND WASTE MEASURES

General :

- Evacuate the area as necessary. Switch off all apparatus. Prevent further spreading and ventilate the area. Avoid contact with the substance. If appropriate, use gloves and breathing equipment with a combination filter (Type ABEK-P). Soak up any spillages with vermiculite or sand and discard as chemical waste. Clean the area after clearing up the spillage. Inform the municipal authorities and those responsible for the environment in the workplace of any major discharge into the surroundings.

Ekokem waste group:	Class:	Class. Code:	PG:	UN no:
H				Non-hazardous for road transport

G : FIRST AID MEASURES

General :

Inhalation:

- The person should be taken into the fresh air, kept quiet and under supervision. If there is a risk of loss of consciousness the person should be placed in the recovery position and kept warm. If the person stops breathing, artificial respiration should be given.

Skin:

- Rinse thoroughly with water, remove contaminated clothing and any jewellery.

Eyes:

- Rinse immediately with water. Hold the eye wide open. Remove contact lenses. Continue to rinse with water until treatment is taken over by doctors.

If swallowed:

- Immediately rinse the mouth out and drink water or milk. Do not give liquids to the unconscious. Do not cause vomiting.

- If discomfort persists consult a doctor, taking along these instructions.

Burns:

- Rinse immediately with water and continue until pain disappears.
- While rinsing with water, remove clothing which is not burnt on the skin.
- Go to emergency department at nearest hospital and continue to rinse with water en route.

H : STORAGE

General :

- Must be stored tightly sealed in a well-ventilated chemical cabinet.
- Avoid sources of ignition (heat, electrical installations). Special requirements for safety notices apply to the storage of large quantities, see the Danish Working Environment Authority Statutory Order on safety notices as amended by no. 518, 1994 and Danish Emergency Management Agency Authority Statutory order on flammable and combustible liquids No. 1639 of 06/12/2016 and associated guidance from 19 January 2017.
- Flammable liquid, class
- III-1
- There must be stored up to 50 storage units per laboratory or chemical storage, or up to 800 units per fire section. (1 storage unit corresponds to 50 liter). See **Danish Emergency Management Agency** Authority Statutory order on flammable and combustible liquids No. 1639 of 06/12/2016 and associated guidance from 19 January 2017.
- Must be kept up to a height of 160 cm. Special requirements as to safety notices apply to the storage of large quantities, see the Danish Working Environment Authority Statutory Order on safety notices as amended by no. 518, 1994.

