

Material Safety Data Sheet. No: SD4028-R00

Issued 26-Oct-11

Section 1 : Chemical Identification

Catalogue No.:	4028-XXXX	Name:	Diethylamine in acetonitrile
-----------------------	-----------	--------------	------------------------------

Section 2 : Hazards Identification

Main Hazard	Highly Flammable
Other Specific Hazards	Corrosive, Toxic

Section 3 : Composition/information on Ingredients

Chemical Name	Composition	CAS No.	EINECS No.
Acetonitrile	80%	75-05-8	200-835-2
Diethylamine	20%	109-89-7	203-716-3

Section 4 : First Aid Measures

Eyes	In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. OBTAIN MEDICAL ATTENTION
Skin	In case of contact, remove contaminated clothing, immediately wash skin with soap and copious amounts of water. OBTAIN IMMEDIATE MEDICAL ATTENTION AT HOSPITAL.
Ingestion	DO NOT induce vomiting. Wash out mouth with water. OBTAIN MEDICAL ATTENTION
Inhalation	Immediately remove to fresh air. If not breathing, give artificial respiration. OBTAIN MEDICAL ATTENTION

Section 5 : Fire Fighting Measures

Extinguishing Media	Carbon dioxide, dry chemical powder or appropriate foam
Special Hazards of Product	Volatile and flammable liquid. Heat will build up pressure in closed storage containers. Vapour may travel some distance to points of ignition and cause flash back. Will produce carbon oxides and nitrogen oxides on combustion.
Protective Equipment for Fire Fighting	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Section 6 : Accidental Release Measures

Personal Protection	Wear protective clothing, respirator, chemical safety goggles, rubber gloves and rubber boots
Leaks and Spills	Ventilate area and remove all sources of ignition. Clean the contaminated area thoroughly with water and absorbent material taking care to avoid breathing fumes. Dispose of all cleaning materials with care (see section 13). Use non-sparking tools.

Section 7 : Handling and Storage

Handling	Wear protective clothing, gloves and safety goggles. Use in a fume extraction cabinet. Avoid contact with eyes, skin and clothing. Avoid inhalation. Wash thoroughly after handling. Avoid heat, sparks and open flames. Keep containers closed when not in use. Earth metal containers when in use.
Storage	Protect from extremes of temperature and direct sunlight. Store in sealed containers in an appropriately protected and secure flammable liquid store. Proper storage should be determined based on other materials stored and their hazards and chemical incompatibilities. Containers which are opened must be carefully resealed & kept upright.

Section 8 : Exposure controls/Personal Protection

Exposure Controls	Always use adequate fume extraction and keep storage vessels closed when not in use. See also sections 6, 7 and 11.
Personal Protection	Protective gloves, goggles or laboratory spectacles and clothing are recommended. See also sections 6 and 7 above.

Section 9 : Physical and Chemical Properties

Physical State	Clear, colourless liquid		
Melting Point	N/A	Boiling Point	55-80°C
Flash Point	-23°C	Explosion Limits	Lower: 1.8% in air by volume Upper: 10.1% in air by volume
Solubility (Water)	Miscible	Solubility (Org. Solvents)	N/A
Chemical Formula	N/A	Molecular Weight	N/A
Other Information	Vapour Pressure at 20°C = 241hPa; Auto ignition temperature = 524°C		

Section 10 : Stability and Reactivity

Chemical Stability	Stable..
Incompatibilities	Oxidising agents and strong acids and bases.
Hazardous Decomposition or Combustion Products	Incomplete combustion can generate carbon monoxide and other toxic vapours.
Hazardous Polymerisation	Does not occur

Section 11 : Toxicological Data

Toxic Effects	Inhalation: Vapours are extremely destructive to the mucous membranes and upper respiratory tract. Long-term, low level exposure can cause nausea, dizziness, headache and central nervous system depression. Eye contact: Causes eye burns Skin Contact: Causes skin burns Ingestion: Harmful if swallowed. Causes burns. Effects of over-exposure: Liver and kidney damage can occur from chronic exposure.
Other Toxicological Data	The toxicological effects of this preparation have not been fully investigated. Information for the components are given below: Exposure Limits (for Diethylamine): Time weighted average: 5ppm or 15mg/m ³ Short Term Exposure Level 10ppm or 30mg/m ³ ORL-RAT LD50 (Diethylamine): 540 mg/kg IHL-RAT LC50 (Diethylamine): 4000ppm/4hr SKN-RBT LD50 (Diethylamine): 577mg/kg

Section 12 : Ecological Information

Toxic to aquatic organisms. In use, caution should be exercised to minimise release into the environment by using appropriate containment procedures.

Product 75% biodegradable (biotic/aerobic) in 28d.

Section 13 : Disposal Information

Dispose by incineration at high temperature in an approved incinerator fitted with appropriate environmental protection equipment. Dispose of in accordance with all applicable Local, National, State and Federal regulations. Labels should not be removed from containers until they have been thoroughly cleaned in an appropriate manner. Containers should not be treated as domestic waste and disposed of appropriately. Always use an approved disposal company.

Section 14 : Transport Information

UN No.	2924	UN Class	3 (8)	UN Packing Gp.	II
---------------	------	-----------------	-------	-----------------------	----

Road Freight	ADR/RID Class 3 (8)
Sea Freight	Class 3 (8); not a marine pollutant.
Air Freight	Class 3 (8)

Section 15 : Regulatory Information

European Information:

R Phrases	R11 – Highly flammable R20/21/22 – Harmful by inhalation, in contact with skin, and if swallowed. R35 – Causes severe burns
S Phrases	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. S29 – Do not empty into drains

Section 16 : Other information

MSDS First Issued	Oct-11	MSDS Last Revision	Oct-11	MSDS Version	R00
--------------------------	--------	---------------------------	--------	---------------------	-----

The information contained in this publication is believed to be accurate and represents the best information currently available to us. However we make no warranty of merchantability or any other warranty, express or implied with respect to this information, and Link Technologies assumes no liability from its use. It remains the responsibility of the user to ensure that the products are used for the particular purpose intended. Link Technologies assumes no liability whatsoever and will not be held responsible for any losses or claims however arising out of the use of this information, the application, the adaptation or processing of the materials supplied. At all times it is the responsibility of the user to ensure that these products are used in a professional manner, by individuals competent in their use who are fully aware of the hazards associated with their use.