



# SAFETY DATA SHEET

SD4050-R00

## 1. Identification

### GHS PRODUCT IDENTIFIER

Product name: Diluent (Acetonitrile)

### OTHER MEANS OF IDENTIFICATION

Item number: 4050

Catalogue number(s): 4050-YZZZ, where Y=letters A-Z, ZZZ=numbers 000-999

Brand: Not applicable.

### RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE

For laboratory and manufacturing use. Not for drug, household or other use.

### SUPPLIER'S DETAILS

Link Technologies Ltd	Tel: +44 (0) 1698 849911
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Scotland	

### EMERGENCY PHONE NUMBER

+44 (0) 1698 849911 (Monday to Friday 8 am to 6 pm)

## 2. Hazard identification

### GHS CLASSIFICATION OF THE SUBSTANCE/MIXTURE

Classification according to Regulation (EC) No. 1272/2008

Skin irritation:	Category 2
Acute toxicity, oral	Category 4
Acute toxicity, inhalation	Category 4
Acute toxicity, dermal	Category 4
Eye irritation	Category 2

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xn	Harmful	R40
Xi	Irritant	R36/37/38

## GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Pictogram



Signal word:

Danger

## Hazard Statements

- H225 Highly flammable liquid and vapour.  
H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.  
H319 Causes serious eye irritation.

## Precautionary Statements

Prevention

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P280 Wear protective gloves/protective clothing.

Response

- P301+P312+P330 IF SWALLOWED: Call a poison centre/doctor if you feel unwell. Rinse mouth.  
P302+P352+P312 IF ON SKIN: Wash with plenty of water. Call a poison centre/doctor if you feel unwell.  
P304+P340+P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison centre/doctor if you feel unwell.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

## OTHER HAZARDS

None

## 3. Composition/information on ingredients

## MIXTURES

## Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
<b>Acetonitrile</b>			
CAS No	75-05-08	Flam. Liq. 2; Acute Tox. 4; Eye Irrit. 2; H225, H302, H332, H312, H319	≤100%
EC No	200-835-2		
Index No	608-001-00-3		



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## Hazardous ingredients according to Directive 1999/45/EC

Component		Classification	Concentration
<b>Acetonitrile</b>			
CAS No	75-05-8	F, Xn, R11 – R20/21/22 – R36	≤100%
EC No	200-835-2		
Index No	608-001-00-3		
Registration No	01-2119471307-38-XXXX		

## 4. First aid measures

### DESCRIPTION OF NECESSARY 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.

#### In case of skin contact

Remove any contaminated clothing. Wash off with soap and plenty of water.

#### In case of eye contact

Flush eyes copiously with water for at least 15 minutes. Use a sterile eye wash if available.

#### If swallowed

Do NOT induce vomiting. Keep person calm and immobile. Rinse mouth with water if conscious. Never give anything by mouth to an unconscious person.

### MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. See section 11.

### INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY

No data available.

## 5. Fire-fighting measures

### SUITABLE EXTINGUISHING MEDIA

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

### SPECIFIC HAZARDS ARISING FROM THE CHEMICAL (E.G. NATURE OF ANY HAZARDOUS COMBUSTION PRODUCTS)

Carbon oxides, nitrogen oxides (NO<sub>x</sub>)

**SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS**

Wear mask and protective clothing to prevent contact with skin and eyes. Wear self-contained breathing apparatus if necessary.

**FURTHER INFORMATIONS**

No data available.

**6. Accidental release measures**

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**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

Wear protective clothing, respirator, chemical safety goggles, rubber gloves and rubber boots. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Be aware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

**ENVIRONMENTAL PRECAUTIONS**

Prevent further leakage or spillage, if safe to do so. Prevent product from entering drains.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP**

Contain spills using absorbent barriers where available. Clean the contaminated area thoroughly with water taking care to avoid breathing fumes. Dispose of all cleaning materials with care (see section 13), where possible containing in sealed containers for appropriate disposal.

**7. Handling and storage**

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**PRECAUTIONS FOR SAFE HANDLING**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Do not eat, drink or smoke when using this product. Keep away from sources of ignition. Take measures to prevent build-up of electrostatic charge.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES**

Containers should be kept sealed and safely stored when not in use. Store in a cool, dry, well-ventilated area. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store under inert gas.

**8. Exposure controls/personal protection**

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**CONTROL PARAMETERS (OCCUPATIONAL EXPOSURE LIMIT VALUES OR BIOLOGICAL LIMIT VALUES)**

Component	CAS No	Value	Control Parameters	Basis
Acetonitrile	75-05-8	TWA	40 ppm 70 mg/m <sup>3</sup>	Europe – indicative occupational exposure limit values
	Remarks	Identifies the possibility of significant uptake through the skin. Indicative.		
		STEL	60 ppm 102 mg/m <sup>3</sup>	UK – EH40 WEL – Workplace Exposure Limits
		TWA		

## APPROPRIATE ENGINEERING CONTROLS

General good industrial laboratory hygiene and safety practice. Use product within air-extracted fume hood where possible. Wash hands before breaks and at the end of the workday.

## INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT

### Eye/face protection

Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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

Splash contact – 0.3mm butyl rubber

Breakthrough time: 10 min

### Body Protection

Complete suit protecting against chemicals, flame-retardant antistatic protective clothing. The type of protective equipment must be selected according to the quantity and concentration of the dangerous substance at the specific workplace.

### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator with multi-purpose combination (US) or type ABEK (EN14387) respirator cartridges as a back-up 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).

## 9. Physical and chemical properties

Appearance (physical state, colour etc.):	Clear, colourless liquid.
Odour:	Ether-like
Odour threshold:	No data available

pH:	No data available
Melting point/freezing point:	Melting point/range: -48°C - lit
Initial boiling point and boiling range:	81 - 82°C
Flash point:	6°C – closed cup
Evaporation rate:	5.8
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits:	Upper explosion limit: 16% (V) Lower explosion limit: 3% (V)
Vapor pressure:	98.64 hPa at 20°C
Vapor density:	1.42 – (Air = 1.0)
Relative density:	0.786 g/cm <sup>3</sup>
Water Solubility:	1,000 g/L at 25°C – completely soluble
Partition coefficient: n-octanol/water:	log Pow: -0.54 at 25°C – Bioaccumulation is not expected
Auto-ignition temperature:	524°C
Decomposition temperature:	No data available
Viscosity:	No data available
Empirical formula:	C <sub>2</sub> H <sub>3</sub> N
Molecular weight (g/mol):	41.053

## 10. Stability and reactivity

### REACTIVITY

No data available.

### CHEMICAL STABILITY

Stable under recommended storage conditions.

### POSSIBILITY OF HAZARDOUS REACTIONS

No data available.

### CONDITIONS TO AVOID (E.G. STATIC DISCHARGE, SHOCK OR VIBRATION)

Heat, flames and sparks. Extremes of temperature and direct sunlight.

### INCOMPATIBLE MATERIALS

Alkali metals, Strong Oxidising agents, Strong Acids and Strong bases, Reducing agents

### HAZARDOUS DECOMPOSITION PRODUCTS

Other decomposition products – no data available.

Hazardous decomposition products formed under fire conditions – carbon oxides, nitrogen oxides (NO<sub>x</sub>).



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In the event of fire: see section 5.

## 11. Toxicological information

### TOXIC EFFECTS

Acute toxicity:

Component	CAS No	Value	Control Parameters	Basis
Acetonitrile	75-05-8	Oral LD50	2730 mg/Kg	Rat
		Dermal LD50	1250 mg/Kg	Rabbit

### ADDITIONAL INFORMATION

RTECS: AL7700000

Treat as cyanide poisoning., Always have on hand a cyanide first-aid kit, together with proper instructions., The onset of symptoms is generally delayed pending conversion to cyanide., Nausea, Vomiting, Diarrhoea, Headache, Dizziness, Rash, Cyanosis, excitement, depression, Drowsiness, impaired judgment, Lack of coordination, stupor, death To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. Ecological information

### TOXICITY

Toxicity to fish : flow-through test LC50 - Pimephales promelas (fathead minnow) - 1,640 mg/l - 96 h  
Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates: static test LC50 - Artemia salina (Brine shrimp) - 400 mg/l - 24 h  
Remarks: (ECHA)

Toxicity to algae: static test NOEC - Phaeodactylum tricornutum - 400 mg/l - 72 h (ISO 10253) static test  
ErC50 - Phaeodactylum tricornutum - 9,696 mg/l - 72 h (ISO 10253)

Toxicity to bacteria: static test EC50 - activated sludge - > 1,000 mg/l - 30 min (OECD Test Guideline 209)

### PERSISTENCE AND DEGRADABILITY

No data available.

### BIOACCUMULATIVE POTENTIAL

No data available.

### MOBILITY IN THE SOIL

No data available.

### OTHER ADVERSE EFFECTS

Avoid release to the environment.

## 13. Disposal Considerations

### DISPOSAL METHODS

For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in section 8 of the SDS. Dispose by incineration at high temperature in an approved incinerator fitted with appropriate environmental protection equipment taking extra care in igniting, as this material is highly flammable. Contaminated packaging should be treated as product. 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. Do not dispose to drains.

## 14. Transport information

### UN number

ADR/RID: 1648      IMDG: 1648      IATA: 1648

### UN proper shipping name

ADR/RID: ACETONITRILE

IMDG: ACETONITRILE

IATA: ACETONITRILE

### Transport hazard class(es)

ADR/RID: 3      IMDG: 3      IATA: 3

### Packing group

ADR/RID: II      IMDG: II      IATA: II

### Environmental hazards

IMDG Marine Pollutant: No

ADR/RID: No

ADN: No

IATA: No

### Special precautions for the user

No data available.

## 15. Regulatory information

This safety datasheet complies with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Fourth revised edition, 2011.

No further safety, health and environmental regulations specific for the product in question are available.

## 16. Other information

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