

Printing date 31.03.2017 Version number 1 Revision: 31.03.2017

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- · Product name: Fenamidone 10 µg/mL in Acetonitrile
- · Part number: DRE-L13408000AL
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Reference material for laboratory use only
- · Manufacturer/Supplier:

LGC LimitedTel:+44 (0) 20 8943 7000Queens RoadFax:+44 (0) 20 8943 2767TeddingtoneMail: gb@lgcstandards.comMiddlesex TW11 0LYWeb: www.lgcstandards.comUNITED KINGDOM

· Further information obtainable from:

Product safety department

eMail: sds-request@lgcgroup.com

• 1.4 Emergency telephone number: +44 (0) 20 8943 7000 (Monday - Friday : 8am - 5pm)

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

Acute Tox. 4 H332 Harmful if inhaled.

Eye Irrit. 2 H319 Causes serious eye irritation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms





GHS02

GHS07

- · Signal word Danger
- · Hazard-determining components of labelling:

Acetonitrile

· 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.

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· Precautionary statements

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

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· **PBT**: Not applicable. · **vPvB**: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture: consisting of the following components.

· Dangerous components:				
	Acetonitrile	> 99%		
EINECS: 200-835-2 RTECS: AL 7700000	Tox. 4, H332; Eye Irrit. 2, H319			
CAS: 161326-34-7		< 0.1%		
RTECS: NJ5065755	🔖 Aquatic Acute 1, H400; Aquatic Chronic 1, H410			

[·] Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may occur even after several hours; therefore medical observation for at least 48 hours after the accident is recommended.

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient in recovery position for transport.

Seek medical treatment.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Seek medical treatment.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse mouth. Do not induce vomiting.

Seek medical treatment.

- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.



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SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- · 5.3 Advice for firefighters
- · Protective equipment:

Mouth respiratory protective device.

Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· 6.2 Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/extraction at the workplace.

Store in cool, dry place in tightly closed receptacles.

Prevent formation of aerosols.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Please refer to the manufacturer's certificate for specific storage and transport temperature conditions. Store only in the original receptacle.

Keep container in a well-ventilated place. Keep away from sources of ignition and heat.

- · Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

 \cdot 7.3 *Specific end use*(s) *No further relevant information available.*

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

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· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

75-05-8 Acetonitrile

WEL Short-term value: 102 mg/m³, 60 ppm Long-term value: 68 mg/m³, 40 ppm

- · Additional information: Lists used were valid at the time of SDS preparation.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the

degradation
The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374



Protective gloves

- · Material of gloves Butyl rubber, BR
- · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Liquid
Colour: Colourless

Odour: Aromatic

Odour threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: -46 °C

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Boiling point/Boiling range:	81 °C
Flash point:	5 °C
Flammability (solid, gaseous):	Not determined.
Ignition temperature:	525 °C
Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapoumixtures is possible.
Explosion limits:	
Lower:	4.4 Vol %
Upper:	16 Vol %
· Vapour pressure at 20 °C:	97 hPa
Density at 20 °C:	0.7827 g/cm³
Relative density	Not determined.
· Vapour density	Not determined.
Evaporation rate	Not determined.
· Solubility in / Miscibility with	
water at 25 °C:	74 g/l
· Partition coefficient (n-octanol/wa	ter): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity Stable under normal conditions.
- · 10.2 Chemical stability Stable under normal conditions.
- $\cdot \textit{Thermal decomposition / conditions to be avoided:} \\$

Formation of toxic gases is possible during heating or in case of fire.

- · 10.3 Possibility of hazardous reactions Forms explosive gas mixture with air.
- · 10.4 Conditions to avoid Heat.
- · 10.5 Incompatible materials:

Strong oxidizing agents.

Strong acids.

· 10.6 Hazardous decomposition products:

Formation of toxic gases is possible during heating or in case of fire.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity

Harmful if swallowed, in contact with skin or if inhaled.

· LD/LC50 values relevant for classification:

75-05-8 Acetonitrile

Oral LD50 2730 mg/kg (rat)

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Dermal	LD50	1250 mg/kg (rabbit)	
161326-34	161326-34-7 Fenamidone (ISO)		
Oral	LD50	2028 mg/kg (rat)	
Dermal	LD50	>2000 mg/kg (rat)	
Inhalative	LC50/4 h	>5 mg/l (rat)	

- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation

Causes serious eye irritation.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

Waste disposal key numbers from EWC have to be assigned depending on origin and processing.

- · Uncleaned packaging:
- **Recommendation:** Dispose of in accordance with national regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- · 14.1 UN-Number
- · ADR, IMDG, IATA UN1648

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ADR IMDG, IATA ILA3 Transport hazard class(es) ADR, IMDG, IATA Class Label ILA4 Packing group ADR, IMDG, IATA II ILA5 Environmental hazards: Not applicable. ILA6 Special precautions for user Danger code (Kemler): Stowage Category Stowage Category B Stowage Category B Stowage Code ILA7 Transport in bulk according to Annex II of Marpol and the IBC Code Transport/Additional information: ADR Limited quantities (LQ) IL Transport category 2 Tunnel restriction code UN 'Model Regulation': UN 1648 ACETONITRILE mixture AACETONITRILE mixture ACETONITRILE mixture ACETON		(Contd. from page
ADR, IMDG, IATA Class 3 Flammable liquids. Label 3 14.4 Packing group ADR, IMDG, IATA II 14.5 Environmental hazards: Not applicable. 14.6 Special precautions for user Warning: Flammable liquids. 23 EMS Number: F-E,S-D Stowage Category B Stowage Category B Stowage Code SW2 Clear of living quarters. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. 14.7 Transport in formation: ADR Limited quantities (LQ) 1L Transport category 2 Tunnel restriction code D/E	· ADR	1648 ACETONITRILE mixture
ADR, IMDG, IATA Class Class Label 3 14.4 Packing group ADR, IMDG, IATA II 14.5 Environmental hazards: Not applicable. 14.6 Special precautions for user Danger code (Kemler): Stowage Category B Stowage Category B Stowage Code SW2 Clear of living quarters. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. Transport/Additional information: ADR Limited quantities (LQ) Limited quantities (LQ) Transport category 2 Tunnel restriction code D/E	· IMDG, IATA	ACETONITRILE mixture
Class 3 Flammable liquids. Label 3 14.4 Packing group ADR, IMDG, IATA II 14.5 Environmental hazards: Not applicable. 14.6 Special precautions for user Warning: Flammable liquids. Danger code (Kemler): 33 EMS Number: F-E,S-D Stowage Category B Stowage Code SW2 Clear of living quarters. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. Transport/Additional information: ADR Limited quantities (LQ) 1L Transport category 2 Tunnel restriction code D/E	· 14.3 Transport hazard class(es)	
Label 3 14.4 Packing group ADR, IMDG, IATA II 14.5 Environmental hazards: Not applicable. 14.6 Special precautions for user Warning: Flammable liquids. 14.6 Special precautions for user Warning: Flammable liquids. 15. EMS Number: F-E,S-D 16. Stowage Category B 17. Stowage Category B 18. Stowage Code SW2 Clear of living quarters. 18. ADR Not applicable. 19. Transport Additional information: 19. ADR 10. Limited quantities (LQ) IL 10. Transport category 2 10. Tunnel restriction code D/E	· ADR, IMDG, IATA	
Label 3 14.4 Packing group ADR, IMDG, IATA II 14.5 Environmental hazards: Not applicable. 14.6 Special precautions for user Warning: Flammable liquids. Danger code (Kemler): 33 EMS Number: F-E,S-D Stowage Category B Stowage Code SW2 Clear of living quarters. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. Transport/Additional information: ADR Limited quantities (LQ) 1L Transport category 2 Tunnel restriction code D/E	3	
14.4 Packing group	· Class	3 Flammable liquids.
ADR, IMDG, IATA II 14.5 Environmental hazards: Not applicable. 14.6 Special precautions for user Warning: Flammable liquids. 33 EMS Number: F-E,S-D Stowage Category B Stowage Code SW2 Clear of living quarters. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. Transport/Additional information: ADR Limited quantities (LQ) Transport category 2 Tunnel restriction code D/E	· Label	
ADR, IMDG, IATA II 14.5 Environmental hazards: Not applicable. 14.6 Special precautions for user Warning: Flammable liquids. 33 EMS Number: F-E,S-D Stowage Category B Stowage Code SW2 Clear of living quarters. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. Transport/Additional information: ADR Limited quantities (LQ) Transport category 2 Tunnel restriction code D/E	· 14.4 Packing group	
14.6 Special precautions for user Danger code (Kemler): EMS Number: Stowage Category B Stowage Code SW2 Clear of living quarters. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Transport/Additional information: ADR Limited quantities (LQ) Transport category 2 Tunnel restriction code 11.		II
Danger code (Kemler): EMS Number: F-E,S-D Stowage Category B Stowage Code SW2 Clear of living quarters. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. Transport/Additional information: ADR Limited quantities (LQ) IL Transport category 2 Tunnel restriction code D/E	14.5 Environmental hazards:	Not applicable.
EMS Number: F-E,S-D Stowage Category B Stowage Code SW2 Clear of living quarters. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. Transport/Additional information: ADR Limited quantities (LQ) 1L Transport category 2 Tunnel restriction code D/E	14.6 Special precautions for user	Warning: Flammable liquids.
Stowage Category Stowage Code SW2 Clear of living quarters. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. Transport/Additional information: ADR Limited quantities (LQ) IL Transport category 2 Tunnel restriction code D/E		33
Stowage Code SW2 Clear of living quarters. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. Transport/Additional information: ADR Limited quantities (LQ) 1L Transport category 2 Tunnel restriction code D/E	EMS Number:	F- E , S - D
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. Transport/Additional information: ADR Limited quantities (LQ) 1L Transport category 2 Tunnel restriction code D/E	· Stowage Category	B
Marpol and the IBC Code Not applicable. Transport/Additional information: ADR Limited quantities (LQ) 1L Transport category 2 Tunnel restriction code D/E	Stowage Code	SW2 Clear of living quarters.
Transport/Additional information: ADR Limited quantities (LQ) 1L Transport category 2 Tunnel restriction code D/E	14.7 Transport in bulk according to An	nex II of
ADR Limited quantities (LQ) Transport category 2 Tunnel restriction code D/E	Marpol and the IBC Code	Not applicable.
Limited quantities (LQ) 1L Transport category 2 Tunnel restriction code D/E	Transport/Additional information:	
Transport category 2 Tunnel restriction code D/E	122 11	
Tunnel restriction code D/E	· Limited quantities (LQ)	IL
2/2	· Transport category	2
· UN ''Model Regulation'': UN 1648 ACETONITRILE MIXTURE, 3, II	· Tunnel restriction code	D/E
	UN ''Model Regulation'':	UN 1648 ACETONITRILE MIXTURE, 3, II

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Philippines Inventory of Chemicals and Chemical Substances

75-05-8 Acetonitrile

· Australian Inventory of Chemical Substances

75-05-8 Acetonitrile

· Standard for the Uniform Scheduling of Medicines and Poisons

None of the ingredients is listed.

- · Directive 2012/18/EU
- $\cdot \textit{Named dangerous substances ANNEX I} \ \textit{None of the ingredients is listed}.$
- · Seveso category P5c FLAMMABLE LIQUIDS
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.



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SECTION 16: Other information

The information in this safety data sheet (SDS) has been prepared with due care and is true and accurate to the best of our knowledge. The user must determine the suitability of the information for its particular purpose, ensure compliance with existing laws and regulations, and be aware that other or additional safety or performance considerations may arise when using, handling and/or storing the material. The information in this SDS does not purport to be all inclusive or a guarantee as to the properties of the material supplied, and should be used only as a guide. LGC makes no warranties or representations as to the accuracy and completeness of the information contained herein, shall not be held responsible for the suitability of this information for the user's intended purposes or the consequences of such use, and shall not be liable for any damage or loss, howsoever arising, direct or otherwise.

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 4: Acute toxicity - Category 4

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

· Sources

Tables 3.1 and 3.2 from Annex 6 of EC 1272/2008, EC 1907/2006, EH40/2005 as amended 2011, Registry of Toxic Effects of Chemical Substances (RTECS), The Dictionary of Substances and their Effects, 1st Edition, IUCLID.

· Data compared to the previous version altered. All sections have been updated.

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