

An ISO 9001 : 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841

Email: info@ottokemi.com Web: www.ottokemi.com

#### **MATERIAL SAFETY DATA SHEET (MSDS)**

**SECTION 1. Product identifiers** 

Product name: Acetonitrile, GR 99%+

Product Code: A 1287 CAS No: 75-05-8

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification
OTTO CHEMIE PVT LTD

101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate,

Chinchpada, Vasai East, Waliv, Maharashtra 401208.

Email info@ottokemi.com

1.4. Emergency telephone number

Phone no.: + 91 22 2207 0099 (9:00am - 6:00 pm)

#### **SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225 Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (Category 4), H332

Acute toxicity, Dermal (Category 4), H312

Eye irritation (Category 2), H319

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

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word Danger

Hazard statement(s)

H225 Highly flammable liquid and vapor.

H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.

H319 Causes serious eye irritation.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

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

protection.

P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel

unwell.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable

for breathing. Call a POISON CENTER/ 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. Continue

rinsina

Supplemental Hazard

Statements

none

Reduced Labeling (<= 125 ml)

Pictogram

Signal Word Danger

Hazard statement(s) none

Precautionary

statement(s)

none

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Supplemental Hazard Statements

none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### **SECTION 3: Composition/information on ingredients**

3.1 Substances

Synonyms: Methyl cyanide

AČN

Formula: C2H3N

Molecular weight: 41,05 g/mol

CAS-No. . 75-05-8 EC-No. 200-835-2 Index No- 608-001-00-3

Mdex 146 000 001 00 0		
Component	Classification	Concentration
Acetonitrile		
CAS-No. 75-05-8	Flam. Liq. 2; Acute Tox. 4;	<= 100 %
EC-No. 200-835-2	Eye Irrit. 2; H225, H302,	
Index-No.608-001-00-3	H332, H312, H319	

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

#### **SECTION 4: First aid measures**

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance

After inhalation: fresh air. If breathing stops: mouth-to-mouth breathing or artificial

respiration. Oxygen if necessary. Immediately call in physician.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with

water/ shower. Consult a physician.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section

2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

#### **SECTION 5: Firefighting measures**

5.1 Extinguishing media

Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NOx)

Combustible.

Pay attention to flashback.

Vapors are heavier than air and may spread along floors.

Development of hazardous combustion gases or vapours possible in the event of fire.

Forms explosive mixtures with air at ambient temperatures.

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#### 5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

### **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.

Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

### **SECTION 7: Handling and storage**

7.1 Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Filled under nitrogen. Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and

sources of ignition.

Storage class

Storage class (TRGS 510): 3: Flammable liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# **SECTION 8: Exposure controls/personal protection**

8.1 Control parameters

Ingredients with workplace control parameters

Derived No Effect Level (DNEL)

Application Value	Area Routes of exposure	Health effect	Value
Workers	Inhalation	Acute local effects, Acute systemic effects	68 mg/m3
Workers	Skin contact	Long-term systemic effects	32,2mg/kg BW/d
Workers	Inhalation	Long-term local effects, Long- term systemic effects	68 mg/m3
Consumers	Inhalation	Acute local effects	220 mg/m3
Consumers	Inhalation	Acute systemic effects	22 mg/m3
Consumers	Inhalation	Long-term systemic effects	4,8 mg/m3

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#### Predicted No Effect Concentration (PNEC)

Compartment	Value
Water	10 mg/l
Soil	2,41 mg/kg
Sea water	1 mg/l
Fresh water	10 mg/l
Fresh water sediment	7,53 mg/kg
Onsite sewage treatment plant	32 mg/l

8.2 Exposure controls

Personal protective equipment

Eye/face protection

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

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: butyl-rubber

Minimum layer thickness: 0,7 mm Break through time: 480 min Material tested:Butoject® (KCL 898)

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de). Splash contact Material: Chloroprene

Minimum layer thickness: 0,65 mm Break through time: 10 min

Material tested:KCL 720 Camapren®

**Body Protection** 

Flame retardant antistatic protective clothing.

Respiratory protection

Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic

compounds

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains. Risk of explosion.

## **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

a) Physical state Clear, liquid b) Color Colorless c) Odor Fther-like

d) Melting point/freezing point

Melting point/range: e) Initial boiling point and boiling range

f) Flammability (solid,gas)

g) Upper/lower flammability or explosive limits

Upper explosion limit: 16 %(V) Lower explosion limit: 4,4 %(V)

-48 °C - lit.

81 - 82 °C - lit. No data available

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h) Flash point

i) Autoignition

temperature

i) Decomposition

temperature

k) pH

I) Viscosity Viscosity, kinematic:

Viscosity, dynamic:

m) Water solubility

n) Partition coefficient:

n-octanol/water

o) Vapor pressure

p) Density

Relative density

q) Relative vapour density

r) Particle characteristics

s) Explosive properties

t) Oxidizing properties

9.2 Other safety information

Surface tension Relative vapor

Density

2,0 °C - closed cup

No data available

No data available

No data available

No data available

0,350 Pas at 20,00 °C

1.000 g/l at 25 °C completely soluble

log Pow: -0,54 at 25 °C - Bioaccumulation is not expected.

98,64 hPa at 20 °C

0,786 g/cm3 at 25 °C - lit.

No data available

No data available

No data available

No data available

none

29,0 mN/m at 20,0 °C

1,42 - (Air = 1.0)

#### **SECTION 10: Stability and reactivity**

10.1 Reactivity

Vapors may form explosive mixture with air.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Violent reactions possible with:

Strong bases

strong reducing agents

Risk of explosion with:

nitrates

perchlorates

perchloric acid

conc. sulfuric acid

with

Heat. Risk of ignition or formation of inflammable gases or vapours with:

Oxidizing agentsNitric acid

nitrogen dioxide

with

Catalyst

Generates dangerous gases or fumes in contact with:

Acids

10.4 Conditions to avoid

Warming.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

# **SECTION 11: Toxicological information**

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Mouse - male and female - 617 mg/kg

(OECD Test Guideline 401)

Acute toxicity estimate Oral - 617 mg/kg

(Calculation method)

LC50 Inhalation - Mouse - male and female - 4 h - 6,022 mg/l - vapor

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(OECD Test Guideline 403)

Acute toxicity estimate Dermal - 1.500 mg/kg

(Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008. Annex VI (Table 3.1/3.2)

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h (OECD Test Guideline 404) Serious eye damage/eye irritation

Eyes - Rabbit

Result: Causes serious eye irritation.

(OECD Test Guideline 405)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Respiratory or skin sensitization Buehler Test - Guinea pig

Result: negative

(OECD Test Guideline 406) Germ cell mutagenicity Test Type: Ames test Test system: S. typhimurium

Metabolic activation: with and without metabolic activation

Result: negative

Remarks: (ECHA) Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: US-EPA Result: negative

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation Result: Positive results were obtained in some in vitro tests.

Remarks: (National Toxicology Program) Test Type: sister chromatid exchange assay Test system: Chinese hamster ovary cells Metabolic activation: Metabolic activation

Result: negative

Remarks: Sister chromatid exchange Test system: Saccharomyces cerevisiae Metabolic activation: without metabolic activation

Result: positive

Remarks: Cytogenetic analysis

(ECHA)

Test Type: In vitro mammalian cell gene mutation test

Test system: Mouse lymphoma test

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Test Type: Micronucleus test

Species: Mouse

. Application Route: Intraperitoneal Method: OECD Test Guideline 474

Result: negative Carcinogenicity

No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Animal testing did not show any effects on fertility. Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

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Aspiration hazard No aspiration toxicity classification

11.2 Additional Information

Endocrine disrupting properties

Product:

Assessment: The substance/mixture does not contain

components considered to have endocrine

disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU)

2017/2100 or Commission Regulation (EU)

2018/605 at levels of 0.1% or higher.

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, Diarrhea, 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.

### **SECTION 12: Ecological information**

12.1 Toxicity

Toxicity to fish flow-through test LC50 - Pimephales promelas (fathead minnow) -

1.640 mg/l - 96 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

Toxicity to

fish(Chronic toxicity)

flow-through test NOEC - Oryzias latipes - 102 mg/l - 21 d

(OECD Test Guideline 204)

12.2 Persistence and degradability

Biodegradability Result: 70 % - Readily biodegradable.

(OECD Test Guideline 310)

12.3 Bioaccumulative potential

No bioaccumulation is to be expected (log Pow <= 4).

12.4 Mobility in soil

Not expected to adsorb on soil.

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent,

bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment: The substance/mixture does not contain components

considered to have endocrine disrupting properties

according to REACH Article 57(f) or Commission

Delegated regulation (EU) 2017/2100 or Commission

Regulation (EU) 2018/605 at levels of 0.1% or higher. 12.7 Other adverse effects

Avoid release to the environment.

Stability in water DT50 - > 9.999 d pH 7 at 25 °C

Remarks: (calculated)Hydrolyzes slowly.

#### **SECTION 13: Disposal considerations**

13.1 Waste treatment methods

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

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### **SECTION 14: Transport information**

14.1 UN number

ADR/RID: 1648 IMDG: 1648 IATA: 1648

14.2 UN proper shipping name ADR/RID: ACETONITRILE IMDG: ACETONITRILE

IATA: Acetonitrile 14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3

IATA: 3 14.4 Packaging group ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user Tunnel restriction code: (D/E)

Further information : No data available

## **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No 1907/2006.

Authorisations and/or restrictions on use

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

: FLAMMABLE LIQUIDS

Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

### Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.