An ISO 9001 : 2015 & GMP Certified Company Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT) Tel : + 91 98200 41841 Email : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers

Product Name : : Acetone, GR 99%+ Product Code : A 1277 CAS No: 67-64-1

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 No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number Phone no. : + 91 98200 41841 (10 : 00 am - 06 : 00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Flammable liquids, (Category 2) Eye irritation, (Category 2) Specific target organ toxicity single exposure, (Category 3), Central nervous system 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Hazard Statements H225 H319 H336 **Precautionary Statements** P210 other ignition sources. No smoking. P233 P240 P241 P242 Use non-sparking tools. P305 + P351 + P338

H225: Highly flammable liquid and vapor. H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness

Danger

Highly flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness or dizziness.

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

Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment.

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

Supplemental Hazard information (EU) EUH066 Repeated exposure may cause skin dryness or cracking. Reduced Labeling (<= 125 ml) Pictogram Signal Word Danger Hazard Statements none Precautionary Statements none Supplemental Hazard information (EU) EUH066 Repeated exposure may cause skin dryness or cracking. 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. Ecological information: The substance/mixture does not contain components considered to have endocrine

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

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd

An ISO 9001 : 2015 & GMP Certified Company Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT) Tel : + 91 98200 41841 Email : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

(EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information:

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.

SECTION 3: Composition/information on ingredients

3.1 Substances	
Formula	: C3H6O
Molecular weight	: 58,08 g/mol
CAS-No.	: 67-64-1
EC-No.	: 200-662-2

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. If inhaled

After inhalation: fresh air. Call in physician.

In case of skin contact

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

water/ shower.

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 physician.

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
Carbon dioxide (CO2) Foam 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
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.
5.3 Advice for firefighters
In the event of fire, wear self-contained breathing apparatus.
5.4 Further information

Remove container from danger zone and cool with water. 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.

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd

An ISO 9001 : 2015 & GMP Certified Company Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT) Tel: + 91 98200 41841 Email: info@ottokemi.com Web: www.ottokemi.com

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 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 Change contaminated clothing. Preventive skin protection recommended. Wash hands 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 Exposure controls/personal protection

6.3 Methods and materials for containment and cleaning up

8.1 Control parameters Ingredients with workplace control parameters Derived No Effect Level (DNEL)

Application Area	Routes of exposure	Health effect	Value
Workers	Skin contact	Long-term systemic effects	186mg/kg BW/d
Consumers	Ingestion	Long-term systemic effects	62mg/kg BW/d
Consumers	Skin contact	Long-term systemic effects	62mg/kg BW/d
Workers	Inhalation	Long-term systemic effects	2420 mg/m3
Workers	Inhalation	Long-term systemic effects	1210 mg/m3
Consumers	Inhalation	Long-term systemic effects	200 mg/m3

Predicted No Effect Concentration (PNEC) G

Compartment	Value
Soil	33,3 mg/kg
Sea water	1,06 mg/l
Fresh water	10,6 mg/l
Sea sediment	3,04 mg/kg
Fresh water sediment	30,4 mg/kg
Onsite sewage treatment plant	100 mg/

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 Skin protection 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

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

An ISO 9001 : 2015 & GMP Certified Company Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT) Tel : + 91 98200 41841 Email : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact 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 EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Body Protection Flame retardant antistatic protective clothing. Respiratory protection required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type AX 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 b) Color c) Odor pungent, d) Melting point/freezing point e) Initial boiling point and boiling range f) Flammability (solid, gas) g) Upper/lower flammability or explosive limits h) Flash point i) Autoignition temperature j) Decomposition temperature k) pH 5 -I) Viscosity m) Water solubility

n) Partition coefficient: n-octanol/water No data available o) Vapor pressure p) Density Relative density q) Relative vapor density r) Particle characteristics s) Explosive properties t) Oxidizing properties 9.2 Other safety information Conductivity 0,01 µS/cm at 20 °C clear, liquid colorless weakly aromatic Melting point/range: -94 °C - lit.

56 °C at 1.013 hPa - lit.

No data available Upper explosion limit: 13 %(V)

Lower explosion limit: 2 %(V) 17,0 °C - closed cup

465,0 °C

Distillable in an undecomposed state at normal pressure

6 at 395 g/l at 20 °C Viscosity, kinematic: No data available Viscosity, dynamic:No data available soluble, in all proportions

245,3 hPa at 20,0 °C 0,791 g/cm3 at 25 °C - lit. No data available No data available

No data available

No data available none

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

An ISO 9001 : 2015 & GMP Certified Company Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT) Tel : + 91 98200 41841 Email : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

Surface tension 23,2 mN/m at 20,0 °C

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 Risk of ignition or formation of inflammable gases or vapours with: chromosulfuric acid chromyl chloride ethanolamine Fluorine Strong oxidizing agents strong reducing agents Nitric acid chromium(VI) oxide Risk of explosion with: nonmetallic oxyhalides halogen-halogen compounds Chloroform nitrating acid nitrosyl compounds hydrogen peroxide halogen oxides organic nitro compounds peroxi compounds Exothermic reaction with: Bromine Alkali metals alkali hydroxides Halogenated hydrocarbon Sulfur dichloride phosphorous oxichloride 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 Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals: Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg Inhalation LC50 Rat: > 50mg/L. Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant). Special Remarks on Toxicity to Animals: Not available. Special Remarks on other Toxic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

An ISO 9001 : 2015 & GMP Certified Company Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT) Tel : + 91 98200 41841 Email : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

(OECD Test Guideline 203)

(OECD Test Guideline 209)

aerobic - Exposure time 28 d Result: 91 % - Readily biodegradable.

6.210 mg/l - 96 h

Remarks: (ECHA)

(DIN 38412)

toxicity)

- 28 d

flow-through test LC50 - Pimephales promelas (fathead minnow) -

static test LC50 - Daphnia pulex (Water flea) - 8.800 mg/l - 48 h

Toxicity to algae static test NOEC - M.aeruginosa - 530 mg/l - 8 d

flow-through test NOEC - Daphnia magna (Water flea) - 2.212 mg/l

Remarks: (maximum permissible toxic concentration

static test EC50 - activated sludge - 61,15 mg/l - 30 min

SECTION 12: Ecological information 12.1 Toxicity Toxicity to fish

Toxicity to daphnia

and other aquatic

invertebrates Toxicity to bacteria

Toxicity to daphnia

and other aquatic invertebrates(Chronic toxicity) Remarks: (ECHA) 12.2 Persistence and degradability Biodegradability

(OECD Test Guideline 301B) **Biochemical Oxygen** Demand (BOD) 1.850 mg/g Remarks: (IUCLID) Chemical Oxygen Demand (COD) 2.070 mg/g Remarks: (IUCLID) Theoretical oxygen demand 2.200 mg/g Remarks: (Lit.) 12.3 Bioaccumulative potential Does not bioaccumulate. 12.4 Mobility in soil No data available 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

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

SECTION 13: Disposal considerations 13.1 Waste treatment methods

No data available

DISCLAIMER

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

An ISO 9001 : 2015 & GMP Certified Company Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT) Tel : + 91 98200 41841 Email : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

SECTION 14: Transport information

substance or mixture

Authorisations and/or restrictions on use Regulation (EU) 2019/1148 on the marketing

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. P5c FLAMMABLE LIQUIDS

15.2 Chemical Safety Assessment

Section 16: Other Information

and use of explosives precursors

1907/2006.

: acetone National legislation

Other regulations

14.1 UN number					
ADR/RID: 1090		IMDG: 1090	IATA: 1090		
14.2 UN proper shipping na	ame				
ADR/RID:	ACETONE				
IMDG:	ACETONE				
IATA:	Acetone				
14.3 Transport hazard clas	s(es)				
ADR/RID: 3		IMDG: 3	IATA: 3		
14.4 Packaging group					
ADR/RID: II		IMDG: II	IATA: II		
14.5 Environmental hazard	IS				
ADR/RID: no		IMDG Marine pollutant: no	IATA: no		
14.6 Special precautions for					
Tunnel restriction code : (D	,				
Further information : No da	ita available				
	· • ··				
SECTION 15: Regulatory information					
15.1 Safety, health and environmental regulations/legislation specific for the					

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

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

obligations regarding the use of hazardous products.

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

DISCLAIMER

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

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product