OTTO CHEMIE PVT LTD

201, 51-53 Maroo Bhavan, Kalbadevi, Mumbai - 400002, India. Tel: + 91 22 2207 0099 / 6638 2599

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

---ISO 9001: 2015----

MATERIAL SAFETY DATA SHEET

1.Identification

1.1GHS Product identifier

2-Amino 2-methyl-1-propanol, 95%

Code A 1967

2. Hazard identification

2.1Classification of the substance or mixture

Skin irritation, Category 2 Eye irritation, Category 2

Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 3

2.2GHS label elements, including precautionary statements

Pictogram(s)

Signal word

Hazard statement(s)

Precautionary statement(s) Prevention

Response

Warning

H315 Causes skin irritation

H319 Causes serious eye irritation

H412 Harmful to aquatic life with long lasting effects

P264 Wash ... thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P273 Avoid release to the environment.

P302+P352 IF ON SKIN: Wash with plenty of water/...

P321 Specific treatment (see ... on this label).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, i

present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

none Storage P501 Dispose of contents/container to ... Disposal

2.3Other hazards which do not result in classification

3. Composition/information on ingredients

3.1Substances

0. Toubotatioco					
Chemical name	Common names and synonyms	CAS number	EC number	Concentration	
2-Amino-2-methyl-1-propanol	2-Amino-2-methyl-1-propanol	124-68-5	none	100%	

4.First-aid measures

4.1Description of necessary first-aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

Fresh air, rest. Refer for medical attention.

In case of skin contact

Remove contaminated clothes. Rinse skin with plenty of water or shower.

In case of eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

Rinse mouth. Do NOT induce vomiting. Give one or two glasses of water to drink. Refer for medical attention .

4.2Most important symptoms/effects, acute and delayed

Causes severe irritation. Inhalation may be fatal as a result of spasm, inflammation, and edema of laryns and bronchi, chemical pneumonitis, and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. (USCG, 1999)

4.3Indication of immediate medical attention and special treatment needed, if necessary

Minimum/Potential Fatal Human Dose

3. 3= MODERATELY TOXIC: PROBABLE ORAL LETHAL DOSE (HUMAN) 0.5-5 G/KG, BETWEEN 1 OZ & 1 PINT (OR 1 LB) FOR 70 KG PERSON (150 LB).

Absorption, Distribution and Excretion

METABOLISM AND DISTRIBUTION OF (3)H-LABELED 2-AMINO-2-METHYLPROPANOL WAS STUDIED IN RATS RECEIVING NORMAL OR CHOLINE-DEFICIENT DIETS. TRITIUM APPEARED IN THE SERUM OF BOTH GROUPS 30 MIN AFTER THE IP INJECTION BUT THE LEVEL WAS GENERALLY LOWER IN THE CHOLINE-DEFICIENT GROUP. RATS ON THE NORMAL DIET EXCRETED MORE OF THE AMINO ACID IN THE URINE THAN DID THE CHOLINE-DEFICIENT RATS IN BOTH GROUPS ONLY THE UNCHANGED AMINO ACID WAS EXCRETED. LIVERS FROM THE CHOLINE-DEFICIENT GROUP HAD A GREATER UPTAKE AND RETENTION OF THE LABEL THAN THOSE FROM NORMAL RATS. MOST OF THE LABEL WAS FOUND IN THE CYTOSOL OF BOTH LIVER AND KIDNEY.

5. Fire-fighting measures

5.1Extinguishing media

Suitable extinguishing media

Excerpt from ERG Guide 128 [Flammable Liquids (Water-Immiscible)]: CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient. CAUTION: For mixtures containing alcohol or polar solvent, alcohol-resistant foam may be more effective. SMALL FIRE: Dry chemical, CO2, water spray or regular foam. LARGE FIRE: Water spray, fog or regular foam. Do not use straight streams. Move containers from fire area if you can do it without risk. FIRE INVOLVING TANKS OR CAR/TRAILER LOADS: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. (ERG, 2016) 5.2Specific hazards arising from the chemical

Special Hazards of Combustion Products: Emits toxic fumes during fire conditions. (USCG, 1999)

5.3Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

6.Accidental release measures

6.1Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2Environmental precautions

Personal protection: filter respirator for organic gases and particulates adapted to the airborne concentration of the substance. Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder. Then store and dispose of according to local regulations.

6.3Methods and materials for containment and cleaning up

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. Handling and storage

7.1Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2Conditions for safe storage, including any incompatibilities

Separated from strong oxidants and strong acids.

8.Exposure controls/personal protection

8.1Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

8.2Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. 8.3Individual protection measures, such as personal protective equipment (PPE)

Eve/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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.

Respiratory protection

Wear dust mask when handling large quantities.

Thermal hazards

no data available

9. Physical and chemical properties

Physical state

Clear, colorless liquid

Colour CRYSTALLINE MASS
Odour no data available
Melting point/ freezing point 24-28\u00baC
Boiling point or initial boiling point and boiling 165\u00b0C(lit.)

range

Flammability Combustible. Gives off irritating or toxic fumes (or gases) in a fire.

no data available

Lower and upper explosion limit / flammability no data available

limit

Flash point 68\u00b0C
Auto-ignition temperature no data available
Decomposition temperature no data available

pH PH OF 0.1 AQ SOLN 11.3

Kinematic viscosity no data available Solubility In water:miscible Partition coefficient n-octanol/water (log value) no data available

Vapour pressure <a> <1 mm Hg (25 \u00b0C) Density and/or relative density <a> <0.934g/mLat 25\u00b0C(lit.)

Density and/or relative density 0.934g/mLat 25\u00b0 Relative vapour density 3 (vs air)

10.Stability and reactivity 10.1Reactivity no data available

10.2Chemical stability

Particle characteristics

Stable under recommended storage conditions.

10.3Possibility of hazardous reactions

2-AMINO-2-METHYL-1-PROPANOL is an organic compound with both amine and alcohol substituents. Amines are chemical bases. They neutralize acids to form salts plus water. These acid-base reactions are exothermic. The amount of heat that is evolved per mole of amine in a neutralization is largely independent of the strength of the amine as a base. Amines may be incompatible with isocyanates, halogenated organics, peroxides, phenols (acidic), epoxides, anhydrides, and acid halides. Flammable gaseous hydrogen is generated by amines in combination with strong reducing agents, such as hydrides.

10.4Conditions to avoid no data available 10.5Incompatible materials no data available

10.6Hazardous decomposition products

no data available

11.Toxicological information

Acute toxicity

Oral: no data available
Inhalation: no data available
Dermal: no data available
Skin corrosion/irritation
no data available
Serious eye damage/irritation
no data available

Respiratory or skin sensitization

no data available
Germ cell mutagenicity
no data available
Carcinogenicity
no data available
Reproductive toxicity
no data available
STOT-single exposure
no data available

STOT-repeated exposure

no data available Aspiration hazard

no data available

12. Ecological information

12.1Toxicity

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

12.2Persistence and degradability

no data available

12.3Bioaccumulative potential

no data available

12.4Mobility in soil

no data available

12.50ther adverse effects

no data available

13.Disposal considerations

13.1Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems. Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

IMDG: Not dangerous goods.

IMDG: Not dangerous goods.

IMDG: Not dangerous goods.

IMDG: no

IATA: Not dangerous goods.

IATA: Not dangerous goods.

IATA: Not dangerous goods.

IATA: no

14.Transport information

14.1UN Number

ADR/RID: Not dangerous goods.

14.2UN Proper Shipping Name

ADR/RID: unknown IMDG: unknown

IATA: unknown 14.3Transport hazard class(es)

ADR/RID: Not dangerous goods.

14.4Packing group, if applicable

ADR/RID: Not dangerous goods. 14.5Environmental hazards

ADR/RID: no

14.6Special precautions for user

no data available

14.7Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15.Regulatory information

15. TSalety, nealth and environmental re	egulations specific for the product in question		
Chemical name	Common names and synonyms	CAS number	EC number
2-Amino-2-methyl-1-propanol	2-Amino-2-methyl-1-propanol	124-68-5	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015		Not Listed.	
New Zealand Inventory of Chemicals (NZIoC)		Listed.	
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			

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.