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# **MATERIAL SAFETY DATA SHEET**

CAS Number: 102-71-6

Version:02

PRODUCT NAME: TRIETHANOLAMINE

1. IDENTIFICATION:

**Product Code** : 90582, 90263, 98042, 91186, 91402, 999020

**Company Name** ADVENT CHEMBIO PRIVATE LIMITED

W-279, MIDC, TTC INDUSTRIAL AREA, THANE-BELAPUR ROAD, RABALE, **Address** 

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**HAZARDS IDENTIFICATION:** 

Hazard classification Not a hazardous substance or mixture

**Labels elements** : Not a hazardous substance or mixture

: Not classified Hazard symbol

Signal word : Not classified

**Hazard statement** Not a hazardous substance or mixture

result in GHS classification

Other hazards which do not : Not a hazardous substance or mixture

ADIENT
S

Triethanolamine	102-71-6	NLT 99.0%	No
Ingredient	CAS Number	Percent	Hazardous

### **FIRST AID MEASURES:**

General information : Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in

attendance.

Call a physician or poison control center immediately. Rinse mouth. Do NOT induce Ingestion

: vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the

Move to fresh air. Call a physician or poison control center immediately. If breathing stops,

provide artificial respiration. If breathing is difficult, give oxygen. Inhalation

Get medical attention if symptoms persist.

Skin contact Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact

lenses. Get medical attention.

**Eve contact** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact

lenses. Get medical attention.

Most important

symptoms/effects, acute

and delayed

Toxic if inhaled. Toxic if swallowed. Toxic in contact with skin. Irritating to eyes, respiratory

system and skin.



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Indication of immediate medical attention and special treatment needed

: No data available.

#### 5. FIRE FIGHTING MEASURES:

General information : In case of fire and/or explosion do not breathe fumes

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media

Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing

media

Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards arising

from the chemical

Special protective equipment and precautions for firefighters

**Special firefighting** 

procedures

Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting

the fire. Fight fire from a protected location. Move containers from fire area if you can do so

without risk.

Special protective

Firefighters must use standard protective equipment including flame retardant coat, helmet

equipment for fire-fighters with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

: May ignite at high temperature.

#### 6. ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment and emergency procedures ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Avoid breathing mists or vapors. Keep upwind. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

Methods and material for containment and cleaning

Eliminate all ignition sources if safe to do so. Use only non-sparking tools. Take precautionary measures against static discharges. Stop leak if possible without any risk. Absorb spill with vermiculite or other inert material, then place in a container for chemical

waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

**Notification Procedures** 

Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if

large amounts are involved.

Environmental precautions

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do

so. Avoid discharge into drains, water courses or onto the ground.

# 7. HANDLING AND STORAGE:

Precautions for safe handling

Do not handle until all safety precautions have been read and understood. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Wear protective gloves/protective clothing/eye

Protection/ face protection. Avoid contact with eyes, skin, and clothing. Do not breathe mist



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or vapor. Use only with adequate ventilation. Wash hands thoroughly after handling.

Conditions for safe storage,

including any incompatibilities

Keep away from food, drink and animal feeding stuffs. Keep container tightly closed in a dry, well-ventilated place. Ground container and transfer equipment to eliminate static electric sparks. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable liquids.

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### 8. EXPOSURE CONTROLS PERSONAL PROTECTION:

**Control parameters** 

Occupational exposure

limits

**Chemical identity** Type Exposure Limit values Source

TRIETHANOLAMINE TWA 5 mg/m3 US. ACGIH Threshold Limit Values

50 μg/m3

(2011)

US. Texas. Effects Screening Levels (Texas Commission on Environmental

Quality) (12 2010)

AN ESL 5 µg/m3 US. Texas. Effects Screening Levels

(Texas Commission on Environmental

Quality) (12 2010)

TWA PEL 5 mg/m3 US. California Code of Regulations, Title

8, Section 5155. Airborne Contaminants

(082010)

Appropriate engineering

**General information** 

Hygiene measures

controls : No data available

Individual protection measures, such as personal protective equipment

ST ESL

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust

ventilation, or other engineering controls to maintain airborne levels below recommended

exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work

area. Use explosion-proof ventilation equipment.

**Eye/face protection** . Wear safety glasses with side shields (or goggles).

**Hand protection** . Chemical resistant gloves.

Other . Wear suitable protective clothing.

**Respiratory protection** In case of inadequate ventilation use suitable respirator. Chemical

respirator with organic vapor cartridge.

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and

protective equipment to remove contaminants. Provide eyewash station and safety shower.

Avoid contact with eyes, skin, and clothing.



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9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance : Clear, colourless to pale yellow, hygroscopic viscous liquid

Odor : Slight ammonia odor

**Solubility** : Miscible in water.

Formula : N(CH2CH2OH)3

Molecular Weight : 149.19 g/mol

Specific Gravity : 1.13 g/cm3 at 20°C

pH : 10.5, 0.1 N Aqueous solution

Boiling Point: 335 °CMelting Point: 20.5 °CFlash Point: 179 °C

Vapor Density (Air=1) : 5.1

Vapor Pressure (mm Hg) : No data available

Evaporation Rate (BuAc=1) : No data available

## 10. STABILITY AND REACTIVITY:

**Reactivity**: No dangerous reaction known under conditions of normal use.

**Chemical stability** : Material is stable under ambient conditions..

Possibility of hazardous

reactions

Hazardous polymerization does not occur.

**Conditions to avoid** : Heat, sparks, flames. Sunlight.

**Incompatible materials** : nonferrous metals, Light metals

**Hazardous decomposition** 

products

In the event of fire: see section 5

## 11. [TOXICOLOGICAL INFORMATION:

# Information on likely routes of exposure

Ingestion : Irritating. May cause nausea, stomach pain and vomiting.

Inhalation May cause irritation to the mucous membranes and upper respiratory tract. May cause

central nervous system effects

Skin contact : Causes mild skin irritation

Eye contact : Causes serious eye irritation.

Information on toxicological effects



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Acute toxicity (list all possible routes of exposure)

**Oral Product** : LD 50 (Rat): 6.400 mg/kg

**Dermal Product** : LD 50 (Rabbit): > 2.000 mg/kg

**Inhalation Product** No data available.

Repeated dose toxicity

**Product** 

No data available.

Skin corrosion/irritation

**Product** 

Prolonged or repeated skin contact may cause drying, cracking, or irritation

Serious eye damage/eye irritation Product

Respiratory or skin

: Irritating to eyes.

sensitization Product

: Not a skin sensitizer.

**Carcinogenicity Product** 

: This substance has no evidence of carcinogenic properties

IARC Monographs on the

**Evaluation of Carcinogenic** 

**Risks to Humans** 

**US. National Toxicology** 

Program (NTP) Report on

Carcinogens

**US. OSHA Specifically** 

Regulated Substances (29

CFR 1910.1001-1050

Germ cell mutagenicity

**In vitro Product** No data available.

Reproductive toxicity

Product

No components toxic to reproduction .

Not known.

No carcinogenic components identified.

: No carcinogenic components identified.

: No carcinogenic components identified.

Specific target organ

toxicity - single exposure

**Product** 

Specific target organ

toxicity - repeated

None known.

exposure Product

**Aspiration hazard Product** Not classified

Other effects None known.

### 12. ECOLOGICAL INFORMATION:

**Ecotoxicity** 

Acute hazards to the aquatic environment

Fish Product : LC 50 (Fathead minnow (Pimephales promelas), 96 h): 10,610 - 13,010 mg/l Mortality



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Aquatic invertebrates LC 50 (Water flea (Daphnia magna), 24 h): 1,390 mg/l Mortality

Product LC 50 (Brine shrimp (Artemia salina), 24 h): 5,600 mg/l Mortality

Chronic hazards to the aquatic environment

Fish Product : No data available.

Aquatic invertebrates

Product

No data available.

**Toxicity to Aquatic Plants** 

Product:

No data available.

Persistence and degradability

**Biodegradation Product** : No data available.

BOD/COD ratio Product : No data available.

Bioaccumulative potential

**Bioconcentration factor** 

(BCF) Product

No data available on bioaccumulation.

Partition coefficient n-

octanol / water (log Kow)

: No data available.

Product

Mobility in soil : The product is soluble in water. May spread in the aquatic environment.

Other adverse effects

There are no data on the ecotoxicity of this product.

### 13. DISPOSAL CONSIDERATION:

**Discharge**, treatment, or disposal may be subject to national, state, or local laws. Disposal

recommendations are based on uncontaminated material.

Contaminated packaging Since emptied containers retain product residue, follow label warnings even after container

is emptied.

### 14. TRANSPORT INFORMATION:

UN No. UN proper shipping Hazard Packaging Marine name Class(es) group Pollutant

DOTNot regulated.IMDGNot regulated.IATANot regulated.

# 15. REGULATORY INFORMATION:

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. Safety, health and environmental regulations/legislation specific for the substance or mixture No Data Available.



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16. OTHER INFORMATION:

NFPA Hazard ID

: 2 0 Flammability

Health

Reactivity

Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue Date : 10/01/2025

Version : 02

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