



SAFETY DATA SHEET

R 33 CE Part B

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME R 33 CE PART B

SUPPLIER

ARDEX ENDURA (INDIA) PRIVATE LIMITED

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2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Irritating to eyes.

Moderate respiratory irritant.

Moderate skin irritant.

May cause sensitization by skin contact.

POTENTIAL HEALTH EFFECTS

INHALATION

Harmful if inhaled and may cause delayed lung injury. May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.

EYE CONTACT SKIN

Contact with eyes may cause irritation.

CONTACT CHRONIC HEALTH

Causes skin irritation.

HAZARD

This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. May cause allergic skin reaction.

EXPOSURE GUIDELINES

TARGET ORGANS

Eyes.

Respiratory system.

Skin.

SYMPTOMS

Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat.

AGGRAVATED MEDICAL CONDITION

Eye disease Asthma. Skin disorders and Allergies.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS-No.	Content
Tofa, reaction products with TEPA	68953-36-6	> 85 %
Tetraethylenepentamine	112-57-2	< 15 %

CHEMICAL FAMILY: Amidoamine.

R 33 CE Part B**4. FIRST-AID MEASURES****GENERAL ADVICE**

Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

INHALATION

If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. Move to fresh air.

INGESTION

Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position. Prevent aspiration of vomit. Turn victim's head to the side.

SKIN CONTACT

Wash off immediately with plenty of water for at least 20 minutes. Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Take off contaminated clothing and shoes immediately. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.

EYE CONTACT

Rinse immediately with plenty of water also under the eyelids for at least 20 minutes. Remove contact lenses.

5. FIRE-FIGHTING MEASURES**EXTINGUISHING MEDIA**

- Alcohol-resistant foam.
- Carbon dioxide (CO₂).
- Dry chemical. Dry sand.
- Limestone powder.

SPECIFIC HAZARDS

Ammonia gas may be liberated at high temperatures. In case of incomplete combustion an increased formation of oxides of nitrogen (NO_x) is to be expected. Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES**PERSONAL PRECAUTIONS**

Wear suitable protective clothing, gloves and eye/face protection. Use self-contained breathing apparatus and chemically protective clothing. Evacuate personnel to safe areas.

ENVIRONMENTAL PRECAUTIONS

Construct a dike to prevent spreading.

SPILL CLEAN UP METHODS

Contact us for advice. Approach suspected leak areas with caution. Place in appropriate chemical waste container.

ADDITIONAL ADVICE

Open enclosed spaces to outside atmosphere. If possible, stop flow of product.

7. HANDLING AND STORAGE**USAGE PRECAUTIONS**

Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer-causing nitrosamines could be formed. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Use only in well-ventilated areas. Avoid contact with eyes. Avoid breathing vapors and/or aerosols. Use personal protective equipment. When using, do not eat, drink or smoke.

STORAGE PRECAUTIONS

Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place. Product may partially freeze with extended exposure to cold temperatures, resulting in crystallization, haziness or separation. If this occurs, product should be warmed to 100-140°F (38-60°C) for one hour and stirred until clear.

TECHNICAL MEASURES/PRECAUTIONS

Do not store in reactive metal containers.

R 33 CE Part B**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****ENGINEERING MEASURES**

Provide readily accessible eye wash stations and safety showers.

Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT**RESPIRATORY PROTECTION**

Wear appropriate respirator when ventilation is inadequate.

HAND PROTECTION

Butyl-rubber

Nitrile rubber. Neoprene gloves. Impervious gloves. The breakthrough time of the selected glove(s) must be greater than the intended use period. : Chemical

EYE PROTECTION

resistant goggles must be worn.

SKIN AND BODY PROTECTION

Long sleeve shirts and trousers without cuffs.

ENVIRONMENTAL EXPOSURE CONTROLS

Construct a dike to prevent spreading.

SPECIAL INSTRUCTIONS FOR PROTECTION AND HYGIENE

Discard contaminated leather articles. Provide readily accessible eye wash stations and safety showers. Wash at the end of each workshift and before eating, smoking or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid
Color	Amber
Odor	Irritating.
Relative density	0.95 (water = 1)
Vapor pressure	< 10.34 mmHg at 21°C
Density	59.307 lb/ft ³ (0.95 g/cm ³) at 70°F (21°C)
Boiling point/range	> 400°F (> 204.44°C)
Flash point	195°C

10. STABILITY AND REACTIVITY**STABILITY**

Stable under normal conditions.

MATERIALS TO AVOID

CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations.

Nitrous acid and other nitrosating agents.

Organic acids (i.e. acetic acid, citric acid etc.).

Mineral acids.

Sodium hypochlorite.

Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.

Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.

Oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Nitric acid.

Ammonia

Nitrogen oxides (Nox).

Nitrogen oxide can react with water vapors to form corrosive nitric acid.

Carbon monoxide.

Carbon dioxide (Co₂).

Nitrosamine.

R 33 CE Part B**11. TOXICOLOGICAL INFORMATION****ACUTE HEALTH HAZARD****INHALATION**

No data is available.

INGESTION

LD50 : > 2,000 mg/kg

Species : Rat.

Method : Estimated.

SKIN CONTACT

LD50 : 8,550 mg/kg

Species : Rabbit.

EYE CONTACT

Eye irritation.

ACUTE DERMAL IRRITATION/CORROSION

Moderate skin irritation.

SENSITIZATION

May cause sensitization by skin contact. Sensitization has occurred in laboratory animals after repeated exposures.

12. ECOLOGICAL INFORMATION**ECOTOXICITY EFFECTS****AQUATIC TOXICITY**

No data is available on the product itself.

TOXICITY TO OTHER ORGANISMS

No data available.

PERSISTENCE AND DEGRADABILITY**MOBILITY**

No data available.

BIOACCUMULATION

No data is available on the product itself.

13. DISPOSAL CONSIDERATIONS**WASTE FROM RESIDUES / UNUSED PRODUCTS**

Contact supplier if guidance is required.

CONTAMINATED PACKAGING

Dispose of container and unused contents in accordance with federal, state, and local requirements.

14. TRANSPORT INFORMATION

DOT Not dangerous goods

IATA Not dangerous goods

IMDG Not dangerous goods

TDG Not dangerous goods

FURTHER INFORMATION

The transportation information is not intended to convey all specific regulatory data relating to this material. For complete transportation information, contact an Air Products customer service representative.

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15. REGULATORY INFORMATION

OSHA Hazard Communication Standard (29 CFR 1910.1 200) Hazard Class(es): Irritant. Sensitizer.

Country	Regulatory list	Notification
USA	TSCA	Included on Inventory.
EU	EINECS	Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or no longer polymer.
Canada	DSL	Included on Inventory.
Australia	AICS	Included on Inventory.
Japan	ENCS	Included on Inventory.
South Korea	ECL	Included on Inventory.
China	SEPA	Included on Inventory.
Philippines	PICCS	Included on Inventory.

EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification: Acute Health Hazard

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level : None.

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65):

This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

WHMIS Hazard Classification: Toxic Material Causing Other Toxic Effects

16. OTHER INFORMATION

TRAINING ADVICE	:	The details of this data sheet must be passed on to all personnel handling the product.
HMIS Rating		
Health	:	2
Flammability	:	1
Physical hazard	:	0

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.