SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: TJ-A33

Trade code: FO000077

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

Recommended use: INDUSTRIAL USE

Uses advised against: N.A.

1.3. Details of the supplier of the safety data sheet

Company: Foam-Tech (Pty) Ltd -A GREENACRES HOLDINGS COMPANY in association with BORGHI SpA
Unit 11 Nordyk Park 5-Tegno Street
Western Cape-South Africa
Tel: +27-22-487 2233
Mob: +27-83-236 8589

Responsable: sds@borghispa.it

1.4. Emergency telephone number

IRELAND: National Poisons Information Centre (NPIC): +353 1 8092166

MALTA: Medicines & poisons info Office 112

UK: National Health Service (NHS) (999 emergency call; 111 non-emergency call)

Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Skin Irrit. 2	Causes skin irritation.
Eye Dam. 1	Causes serious eye damage.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Hazard pictograms and Signal Word

Danger

Hazard statements

H315	Causes skin irritation.
H318	Causes serious eye damage.

Precautionary statements

P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310	Immediately call a doctor.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

Contains

1,4-diazabicyclooctane

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%.

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: TJ-A33

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
≥ 30 - < 40 %	1,4-diazabicyclooctane	CAS:280-57-9 EC:205-999-9	Flam. Sol. 1, H228; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318	

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediatley and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

-Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment: No specific antidote. Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Alcohol-resistant foam.Carbon dioxide (CO2).Drychemical.

Extinguishing media which must not be used for safety reasons:

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

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Fire Fighting Procedures: Do not usewater jet as an extinguisher, as this will spread the fire. Use water spray to keep fire-exposed containers cool.

Special protective equipment for firefighters: Wear self-contained breathing apparatus forfirefighting if necessary. Use personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

-Avoid contact witheyes, skin, and clothing. Avoid contact with liquid and vapors. Use personal protective equipment.

For emergency responders:

Remove all personnel not adequately equipped to deal with the emergency. Wear suitable personal protective equipment referred to in section 8 of the safety data sheet to prevent contamination of skin, eyes and personal clothing. Stop the leak if there is no danger. Make the area affected by the accident accessible to workers only after adequate reclamation has taken place. Ventilate the premises affected by the accident. Remove any metal containers and materials that may be damaged by the leak.

6.2. Environmental precautions

Avoid discharge into drains, water courses or ontotheground.

6.3. Methods and material for containment and cleaning up

Remove sources of ignition. In case of spills, beware of slippery floors and surfaces.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Washhands after handling. Provide adequate ventilation. Avoid inhalation of vapors and spray mists.

Advice on general occupational hygiene:

Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

-Keep container tightly closed. Keep away from sources of ignition -No smoking.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

1,4-diazabicyclooctane

CAS: 280-57-9 Nationa CANADA Long Term: 4.6 mg/m3 - 1 ppm

Derived No Effect Level (DNEL) values

1,4-diazabicyclooctane

CAS: 280-57-9 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker: 8.24 mg/m3; Worker Industry: 8.24 mg/m3; Worker Professional: 8.24 mg/m3; Consumer: 1.46 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker: 1.4 mg/kg/day; Worker Industry: 1.4 mg/kg/day; Worker Professional: 1.4 mg/kg/day; Consumer:

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 0.5 mg/kg/day

8.2. Exposure controls

Eye protection:

- Use protective goggles suitable for chemical risks.
- If there is a risk of splashing, wear:
- Tight fitting safety goggles
- Protective visor
- The equipment must comply with EN 166

Protection for skin:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

Protection for hands:

Information on specific glove types provided is based on published documentation and glove manufacturers' data. The working conditions can significantly affect the suitability and durability of the gloves. Contact the glove manufacturer for specific information on the suitability and durability of gloves in specific working conditions. Inspect and replace gloves worn or damaged.

Use protective gloves that guarantee total protection, eg. in PVC, neoprene or rubber (EN374).

Gloves should be discarded and replaced if there are signs of degradation or passage of chemicals.

Respiratory protection:

Not required; except in case of aerosol formation.

Thermal Hazards:

N.A.

Environmental exposure controls:

Emissions from manufacturing processes, including those from ventilation equipment, should be controlled for compliance with environmental protection legislation.

Hygienic and Technical measures

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	colorless to yellow
Odour:	like: Amines
pH:	N.A.
Kinematic viscosity:	N.A.
Melting point/freezing point:	-20 °C (-4 °F)
Boiling point or initial boiling point and boiling range:	149 °C (300 °F)
Flash point:	88 °C (190 °F)
Lower and upper explosion limit:	N.A.
Relative vapour density:	N.A.
Vapour pressure:	1.03(kPa 50°C). hPa (38°C)
Density and/or relative density:	1.03 g/cm3 25°C
Solubility in water:	Soluble
Solubility in oil:	N.A.
Partition coefficient n-octanol/water (log value):	N.A.
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Flammability:	N.A.
Volatile Organic compounds - VOCs =	N.A.
Particle characteristics:	
Particle size:	N.A.

9.2. Other information

Explosive properties:	non explosive
Oxidizing properties:	no

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

Stable under recommended storage and handling conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Acids. Oxidizing agents. Halogens.

10.6. Hazardous decomposition products

In case of fire, gives off (emits): Carbon oxides,Nitrogen Oxides.Carbon monoxide is highly toxic if inhaled; carbondioxide in sufficient concentrations can act as an asphyxiant. Acute overexposure to theproducts of combustion may result in irritation of the respiratory tract.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological Information of the Preparation

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met
b) skin corrosion/irritation	The product is classified: Skin Irrit. 2(H315)
c) serious eye damage/irritation	The product is classified: Eye Dam. 1(H318)
d) respiratory or skin sensitisation	Not classified
	Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified
	Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified
	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified
	Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified
	Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

1,4-diazabicyclooctane

CAS: 280-57-9	a) acute toxicity	LD50 Oral Rat = 700 mg/kg bw Notes: Symptoms: Possible damages:, mucosal irritations
		LD50 Skin Rabbit >= 2000 mg/kg
	b) skin	Skin Irritant Rabbit Positive
	c) serious eye damage/irritation	Eye Corrosive Rabbit Positive Notes: (OECD Test Guideline 405)
	d) respiratory or skin sensitisation	Respiratory Sensitization Guineapig Negative Notes: (OECD Test Guideline 406)
	e) germ cell mutagenicity	Mutagenesis Salmonella Typhimurium Negative Notes: Ames Test -OECD Test Guideline 471
	f) carcinogenicity	Carcinogenicity Negative
	g) reproductive toxicity	Reproductive Toxicity Negative
	h) STOT-single exposure	Respiratory Tract Irritant Negative
	i) STOT-repeated exposure	Respiratory Tract Irritant Negative
	j) aspiration hazard	Respiratory Tract Irritant Negative

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

List of Eco-Toxicological properties of the components

1,4-diazabicyclooctane

CAS: 280-57-9 a) Aquatic acute toxicity: LC50 Fish Cyprinus carpio > 100 mg/L 96h - (OECD Test Guideline 203)

a) Aquatic acute toxicity: EC50 Daphnia Daphnia magna > 100 mg/L 48h - (OECD Test Guideline

a) Aquatic acute toxicity: EC50 Algae Raphidolcelis subcapitata = 180 mg/L

12.2. Persistence and degradability

1,4-diazabicyclooctane

CAS: 280-57-9 Non-readily biodegradable Duration: 28d; Value: = 700 g/L
Notes: aerobic-(OECD Test Guideline 301B)

12.3. Bioaccumulative potential

1,4-diazabicyclooctane

CAS: 280-57-9 Not bioaccumulative Test: BCF - Bioconcentrantion factor; Value: < 1.3
Notes: (OECD Test Guideline 305C)

12.4. Mobility in soil

1,4-diazabicyclooctane

CAS: 280-57-9 Notes: No data available

12.5. Results of PBT and vPvB assessment

No PBT or vPvB substances present in concentration >= 0.1%

12.6 Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7 Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

Additional disposal information:

The methods of waste management must be assessed case by case, in relation to the composition of the waste itself, in the light of the provisions of the Community and national legislation in force.

For handling and measures in the event of accidental waste dispersion, the indications provided in points 6 and 7 apply in general; however, precautions and specific actions must be assessed in relation to the composition of the waste.

Resort to the disposal of the waste constituted by the substance after evaluating the possibilities of reuse or reuse in the same or in another production cycle, or start recovery in companies authorized pursuant to Legislative Decree 152/2006.

The waste made up of emptied containers must be placed in an area specifically identified for their collection pending disposal. The area must be paved and covered in order to avoid run-off by atmospheric precipitation.

The containers of the substance as it is, duly emptied, can be disposed of in landfills for special waste authorized, pursuant to Legislative Decree 36/2003, to withdraw the waste code attributed to them, provided that they comply with the limits and conditions for acceptability established by the same Legislative Decree 36/2003 and by the D.M. 27/09/2010.

The substance, in case of disposal as it is, pursuant to Directive 2008/98 / EC, can be disposed of in chemical-physical treatment plants authorized, pursuant to Legislative Decree 152/2006, to withdraw the waste code attributed to substance.

Disposal via the wastewater drain is not permitted.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

N.A.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

N.A.

14.6. Special precautions for user

N.A.

Road and Rail (ADR-RID):

N.A.

Air (IATA):

N.A.

Sea (IMDG):

N.A.

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 CLP)
Regulation (EU) n. 2020/878

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3

Restrictions related to the substances contained: 40

Provisions related to directive EU 2012/18 (Seveso III):

N.A.

Regulation (EU) No 649/2012 (PIC regulation)

No substances listed

German Water Hazard Class.

Class 1: slightly hazardous for water.

SVHC Substances:

No SVHC substances present in concentration >= 0.1%

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
H228	Flammable solid.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.

Code	Hazard class and hazard category	Description
2.7/1	Flam. Sol. 1	Flammable solid, Category 1
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: KAFH
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.