

according to Regulation (EC) No 1907/2006

# Tenax TeFill 3 Activator

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

#### 1.1. Product identifier

Tenax TeFill 3 Activator 1155 Activator

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

#### Use of the substance/mixture

Industrial and professional use.

### Uses advised against

any non-intended use.

## 1.3. Details of the supplier of the safety data sheet

Company name: Tenax USA 7606 Whitehall Executive Center Dr., Suite 400

Place: Charlotte, NC 28273

Telephone/Email: 704-583-1173 info@tenaxusa.com

Internet: www.tenax4you.com sales@parsonadhesives.com

Responsible Department: Infotrac 1-800-535-5053 (US and Canada)

## 1.4. Emergency telephone

number:

### **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

### Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquid: Flam. Liq. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

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

# 2.2. Label elements

### Regulation (EC) No. 1272/2008

# Hazardous components which must be listed on the label

Acetone

Signal word: Danger

Pictograms:





# **Hazard statements**

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

# **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P312 Call a POISON CENTER/doctor if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/attention.

P370+P378 In case of fire: Use Water spray. Carbon dioxide. Extinguishing powder. Dry extinguishing

powder. alcohol resistant foam. to extinguish.



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P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of waste according to applicable legislation.

### Special labelling of certain mixtures

EUH066 Repeated exposure may cause skin dryness or cracking.

### 2.3. Other hazards

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

# **SECTION 3: Composition/information on ingredients**

### 3.2. Mixtures

#### **Hazardous components**

CAS No	Chemical name						
	EC No	Index No	REACH No				
	Classification according to Regulation (EC) No. 1272/2008 [CLP]						
67-64-1	acetone; propan-2-one; propanone						
	200-662-2	606-001-00-8					
	Flam. Liq. 2, Eye Irrit. 2,	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066					
99-97-8	N,N-dimethyl-p-toluidine						
	202-805-4	612-056-00-9					
	Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, STOT RE 2, Aquatic Chronic 3; H331 H311 H301 H373 ** H412						

Full text of H and EUH statements: see section 16.

# **Further Information**

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

### **General information**

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

#### After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In all cases of doubt, or when symptoms persist, seek medical advice.

# After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Change contaminated clothing. In case of skin irritation, consult a physician.

### After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

# After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). In all cases of doubt, or when symptoms persist, seek medical advice.

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

Inhalation causes narcotic effects/intoxication.

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

Treat symptomatically.



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# **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

# Suitable extinguishing media

Water spray. Carbon dioxide. Extinguishing powder. Dry extinguishing powder. alcohol resistant foam.

### Unsuitable extinguishing media

High power water jet. High power water jet.

## 5.2. Special hazards arising from the substance or mixture

Combustible. Vapours may form explosive mixtures with air.

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2).

### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

#### Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. In case of fire and/or explosion do not breathe fumes.

### **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment. (See section 8.)

Remove all sources of ignition. Remove persons to safety. Ventilate affected area. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.

Avoid contact with skin, eyes and clothes. Do not breathe gas/vapour/aerosol.

# 6.2. Environmental precautions

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter into surface water or drains. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.

## 6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

Clean contaminated objects and areas thoroughly observing environmental regulations.

### 6.4. Reference to other sections

See protective measures under point 7 and 8.

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

#### Advice on safe handling

Provide adequate ventilation as well as local exhaustion at critical locations.

Wear personal protection equipment. (refer to chapter 8)

# Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Heating causes rise in pressure with risk of bursting. Flammable vapours can accumulate in head space of closed systems.

### Further information on handling

Avoid contact with skin, eyes and clothes. Do not breathe gas/vapour/aerosol.

General protection and hygiene measures: refer to chapter 8

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Protect against direct sunlight.



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### Advice on storage compatibility

Do not store together with: Gas. Explosives. Flammable solids. Pyrophoric liquids and solids. Self-heating substances and mixtures. Substances and mixtures which, in contact with water, emit flammable gases. Oxidizing liquids. Oxidizing solids. ammonium nitrate. Self-reactive substances and mixtures. Organic peroxides. Noncombustible toxic substances. Radioactive substances. Infectious substances.

### Further information on storage conditions

Recommended storage temperature: 20°C

Protect against: Light. heat. Cold. moisture. UV-radiation/sunlight.

### 7.3. Specific end use(s)

refer to section 1.

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

### **Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
67-64-1	Acetone	500	1210		TWA (8 h)	WEL
		1500	3620		STEL (15 min)	WEL

#### 8.2. Exposure controls



## Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used.

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

### Protective and hygiene measures

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. Protect skin by using skin protective cream.

# Eye/face protection

Suitable eye protection: Tightly sealed safety glasses. DIN EN 166

# Hand protection

Wear suitable gloves. DIN EN 374

Suitable material:

Butyl rubber. - Thickness of glove material: 0,5 mm

(Breakthrough time > 4 h)

penetration time (maximum wearing period): >= ~160 min.

In the case of wanting to use the gloves again, clean them before taking off and air them well. Before using check leak tightness / impermeability.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

### Skin protection

Protective clothing.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.



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### Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

exceeding exposure limit values

Suitable respiratory protective equipment: Protective respiration apparatus not using surrounding air (breathing apparatus) (DIN EN 133).

### **Environmental exposure controls**

Do not allow to enter into surface water or drains.

### **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: colourless
Odour: characteristic

Test method

pH-Value: not determined

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

Softening point:

Pour point:

Flash point:

Sustaining combustion:

No determined

No data available

**Flammability** 

Gas: not determined

**Explosive properties** 

In use, may form flammable/explosive vapour-air mixture.

Lower explosion limits: 2,5 vol. %
Upper explosion limits: 14,3 vol. %
Ignition temperature: 370 °C

**Auto-ignition temperature** 

Gas: not determined

**Oxidizing properties** 

none

Vapour pressure: 246 hPa

(at 20 °C)

Vapour pressure: 814 hPa

(at 50 °C)

Density (at 20 °C): 0,79 g/cm³ Water solubility: not miscible - partially miscible

Solubility in other solvents

miscible.

Partition coefficient: not determined Viscosity / dynamic: not determined

(at 20 °C)



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Viscosity / kinematic:

No information available.

Flow time:

not determined

(at 20 °C)

Vapour density:

Solvent separation test:

Solvent content:

No information available.

not determined

50-100%

9.2. Other information

Solid content: not determined

No information available.

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No information available.

# 10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

### 10.3. Possibility of hazardous reactions

Heating causes rise in pressure with risk of bursting. Flammable vapours can accumulate in head space of closed systems. In use, may form flammable/explosive vapour-air mixture.

### 10.4. Conditions to avoid

Ignition hazard. Keep away from heat. Protect against direct sunlight.

#### 10.5. Incompatible materials

Hydrogen peroxide, bromine trifluoride, Difluordioxid, 2-methyl-1,3-butadiene, nitromethane, nitrosyl chloride (catalyst), Nitrosylperchlorat, alkali hydroxide, bromine, fluorine, sodium, strong reducing agents, nitric acid, chromic acid, chromium trioxide, chromyl chloride, ethanolamine, Potassium tert-butoxide. Oxidizing agents, strong.

# 10.6. Hazardous decomposition products

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2).

# **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

#### Toxicocinetics, metabolism and distribution

No information available.

# **Acute toxicity**

Based on available data, the classification criteria are not met.



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CAS No	Chemical name						
	Exposure routes	Method	Dose	Species	Source		
67-64-1	acetone; propan-2-one; propanone						
	oral	LD50	5800 mg/kg	Rat	ECHA Dossier		
	dermal	LD50	7400 mg/kg	Rabbit	ECHA Dossier		
	inhalative (4 h) vapour	LC50	50,1 mg/l	Rat	RTECS		
99-97-8	N,N-dimethyl-p-toluidine						
	oral	ATE	100 mg/kg				
	dermal	LD50	>2000 mg/kg	Rat	ECHA Dossier		
	inhalative (4 h) vapour	LC50	1,4 mg/l	Rat	GESTIS		
	inhalative aerosol	ATE	0,5 mg/l				

### Irritation and corrosivity

Causes serious eye irritation.
Irritant effect on the eye: Irritant.
Irritant effect on the skin: Not an irritant.

### Sensitising effects

Based on available data, the classification criteria are not met.

no danger of sensitization.

The statement is derived from the properties of the single components.

### STOT-single exposure

May cause drowsiness or dizziness. (acetone; propan-2-one; propanone)

# Severe effects after repeated or prolonged exposure

Repeated exposure may cause skin dryness or cracking.

Acetone:

Subchronic oral toxicity (90d): NOAEL = 900 mg/m3 (Rat)

# Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

Acetone:

No experimental indications of mutagenicity in-vitro exist. literature infomation: ECHA Dossier Developmental toxicity/teratogenicity (Rat) NOAEL = 11000 ppm; literature infomation: ECHA Dossier

# **Aspiration hazard**

Based on available data, the classification criteria are not met.

### Specific effects in experiment on an animal

No information available.

## **SECTION 12: Ecological information**

### 12.1. Toxicity

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h]   [d]	Species	Source
67-64-1	acetone; propan-2-one; propanone					
	Acute fish toxicity	LC50	5540 mg/l	96 h	Onchorhynchus mykiss	ECHA Dossier
	Acute crustacea toxicity	EC50	8800 mg/l	48 h	Daphnia pulex	ECHA Dossier
99-97-8	N,N-dimethyl-p-toluidine					
	Acute fish toxicity	LC50	46-53 mg/l	96 h	Pimephales promelas	GESTIS

# 12.2. Persistence and degradability



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CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation	•		•	
67-64-1	acetone; propan-2-one; propanone				
	OECD 301B / ISO 9439 / EEC 92/69 annex V, C.4-C	90	28	ECHA Dossier	
	Product is biodegradable.				

#### 12.3. Bioaccumulative potential

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-64-1	acetone; propan-2-one; propanone	-0,24
99-97-8	N,N-dimethyl-p-toluidine	2,81

## 12.4. Mobility in soil

No information available.

## 12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

#### 12.6. Other adverse effects

No information available.

## **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

# Advice on disposal

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to EAKV:

#### Waste disposal number of waste from residues/unused products

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products;

organic wastes containing hazardous substances

Classified as hazardous waste.

### Waste disposal number of used product

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products;

organic wastes containing hazardous substances

Classified as hazardous waste.

#### Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE

CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances

Classified as hazardous waste.

### Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

# **SECTION 14: Transport information**

# Land transport (ADR/RID)

**14.1. UN number:** UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Acetone)

14.3. Transport hazard class(es): 3



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14.4. Packing group: II
Hazard label: 3



Classification code: F1

Special Provisions: 274 601 640D

Limited quantity: 1 L
Excepted quantity: E2
Transport category: 2
Hazard No: 33
Tunnel restriction code: D/E

Inland waterways transport (ADN)

**14.1. UN number:** UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Acetone)

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



Classification code: F1

Special Provisions: 274 601 640D

Limited quantity: 1 L Excepted quantity: E2

Marine transport (IMDG)

**14.1. UN number:** UN 1993

**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (Acetone)

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



Marine pollutant: NO
Special Provisions: 274
Limited quantity: 1 L
Excepted quantity: E2
EmS: F-E, S-E

Air transport (ICAO)

**14.1. UN number:** UN 1993

**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (Acetone)

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



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Special Provisions:

Limited quantity Passenger:

Passenger LQ:

Excepted quantity:

A3

1 L

Y341

Excepted quantity:

E2

IATA-packing instructions - Passenger: 353
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 364
IATA-max. quantity - Cargo: 60 L

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

refer to chapter 6-8

## 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

# **SECTION 15: Regulatory information**

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

#### **EU** regulatory information

2010/75/EU (VOC): 100 % (calculated.) 2004/42/EC (VOC): 790 g/l (calculated.)

Information according to 2012/18/EU P5c FLAMMABLE LIQUIDS

(SEVESO III):

Additional information:

### **Additional information**

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

REACH 1907/2006 Appendix XVII: 3

#### **National regulatory information**

Employment restrictions: Observe employment restrictions for young people.

Water contaminating class (D): 2 - water contaminating

# 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

### **SECTION 16: Other information**

# Changes

Rev. 1.00; 05.17.2018 Initial release

#### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

CAS Chemical Abstracts Service DNEL: Derived No Effect Level

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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

ICAO: International Civil Aviation Organization



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ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level NOAEC: No observed adverse effect level

NTP: National Toxicology Program

N/A: not applicable

OSHA: Concerning the International Transport of Dangerous Goods by Rail)

PNEC: predicted no effect concentration PBT: Persistent bioaccumulative toxic

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de

fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

SARA: Superfund Amendments and Reauthorization Act

SVHC: substance of very high concern TRGS Technische Regeln für Gefahrstoffe TSCA: Toxic Substances Control Act VOC: Volatile Organic Compounds

VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe

WGK: Wassergefährdungsklasse

### Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H319	Causes serious eye irritation.

H331 Toxic if inhaled.

May cause drowsiness or dizziness. H336

H373 May cause damage to organs through prolonged or repeated exposure.

Harmful to aquatic life with long lasting effects. H412

**EUH066** Repeated exposure may cause skin dryness or cracking.

# **Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)