



Tenax Spa

TEBLOSSOM REAGENT 2

Revision nr.1
Dated 10/9/2019
First compilation
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Safety Data Sheet

According to Canadian HPR - WHMIS 2015

1. Identification

1.1. Product identifier

Product name **TEBLOSSOM REAGENT 2**

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

Intended use **Stain remover**

Identified Uses	Industrial	Professional	Consumer
ADHESIVE SYSTEM/TREATMENT FOR STONE SECTOR	-	✓	-

1.3. Details of the supplier of the safety data sheet

Name **Tenax Spa**
Full address **Via I Maggio, 226**
District and Country **37020 Volargne (VR)**
Italy
Tel. **+39 045 6887593**
Fax **+39 045 6862456**

e-mail address of the competent person responsible for the Safety Data Sheet **msds@tenax.it**

Product distribution by: **Tenax Usa**
7606 Whitehall Executive Center Drive Suite 400, 28273 Charlotte NC, US
Tel. **001 7045831173** - Fax **001 7045833166**
info@tenaxusa.com

1.4. Emergency telephone number

For urgent inquiries refer to **24hrs:**

Manitoba Poison Centre 1-855-7POISON (1-855-776-4766)

BC Drug and Poison Information Centre (DPIC)
1-800-567-8911 (toll free in BC)
(604) 682-5050 (Greater Vancouver or outside of BC)

Centre antipoison du Québec 1-800-463-5060

IWK Regional Poison Centre
1-800-565-8161 (within NS and PEI only)
(902) 470-8161 (Halifax or outside NS, PEI)

Poison And Drug Information Services (PADIS)
1-800-332-1414 (toll free in Alberta, Northwest Territories)
1-866-454-1212 (toll free in Saskatchewan)
(403) 944-1414 (in Calgary, outside of Alberta, or VOIP users)

Ontario Poison Centre 1-800-268-9017

2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in Canada's Hazardous Products Regulations (HPR) (WHMIS 2015). The product thus requires a safety datasheet.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Classification and Hazard Statement

2. Hazards identification ... / >>

Reproductive toxicity, category 1B
Eye irritation, category 2
Skin irritation, category 2
Specific target organ toxicity - single exposure, category 3

May damage fertility or the unborn child.
Causes serious eye irritation.
Causes skin irritation.
May cause respiratory irritation.

Hazard pictograms:



Signal words: Danger

Hazard statements:

H360 May damage fertility or the unborn child.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H335 May cause respiratory irritation.

Precautionary statements:

Prevention:

P261 Avoid breathing dust / fume / gas / mist / vapours / spray.
P202 Do not handle until all safety precautions have been read and understood.
P201 Obtain special instructions before use.
P280 Wear protective gloves/ protective clothing / eye protection / face protection.
P271 Use only outdoors or in a well-ventilated area.
P264 Wash the hands thoroughly after handling.

Response:

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTRE / doctor / . . . if you feel unwell.
P304+P340 IF INHALED: remove person to fresh air and keep comfortable for breathing.
P362+P364 Take off contaminated clothing and wash it before reuse.

Storage:

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal:

P501 Dispose of contents / container according to applicable law.

2.2. Other hazards

Information not available

3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. % (w/w)	Classification:
N-METHYL-2-PYRROLIDONE		
CAS	872-50-4 50	Reproductive toxicity, category 1B H360, Eye irritation, category 2 H319, Skin irritation, category 2 H315, Specific target organ toxicity - single exposure, category 3 H335

The full wording of hazard (H) phrases is given in section 16 of the sheet.

4. First-aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.
SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.



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4. First-aid measures ... / >>

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately. **INGESTION:** Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

5. Fire-fighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.



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7. Handling and storage ... / >>

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

EU OEL EU Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.

N-METHYL-2-PYRROLIDONE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		SKIN
		mg/m ³	ppm	mg/m ³	ppm	
OEL	EU	40	10	80	20	SKIN
ONT	CAN	400				

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must comply with current regulations.

HAND PROTECTION

Protect hands with category III work gloves (OSHA 29 CFR 1910.138).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear. Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (OSHA 29 CFR 1910.133, CSA Standard CAN/CSA-Z94.3-92).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a NIOSH certified filter, whose class must be chosen according to the limit of use concentration (NIOSH 42 CFR 84, OSHA 29 CFR 1910.134, CSA Standard Z94.4-02). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus or external air-intake breathing apparatus. For a correct choice of respiratory protection device, see standard NIOSH 42 CFR 84, OSHA 29 CFR 1910.134, CSA Standard Z94.4-02.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	orange	
Odour	odourless	
Odour threshold	Not available	
pH	Not available	
Melting point / freezing point	Not available	
Initial boiling point	> 200 °C (392 °F)	
Boiling range	Not available	



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9. Physical and chemical properties ... / >>

Flash point	>	93 °C	(199,4 °F)
Evaporation Rate		Not available	
Flammability of solids and gases		Not available	
Lower inflammability limit		Not available	
Upper inflammability limit		Not available	
Lower explosive limit		Not available	
Upper explosive limit		Not available	
Vapour pressure		0.23 mmHg	
Vapour density		Not available	
Relative density		1.15	
Solubility		slightly soluble	
Partition coefficient: n-octanol/water		Not available	
Auto-ignition temperature		Not available	
Decomposition temperature		Not available	
Viscosity		≤12000 CPS	
Explosive properties		Not available	
Oxidising properties		Not available	

9.2. Other information

Information not available

10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

N-METHYL-2-PYRROLIDONE

Decomposes at temperatures above 300°C/572°F. Dissolves various plastic materials.

When exposed to the air it oxidates slowly to develop hydroperoxides. Completely mixable with water with a neutral or slightly basic reaction. It does not attack common materials.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

N-METHYL-2-PYRROLIDONE

Is stable up to 315°C/599°F.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

N-METHYL-2-PYRROLIDONE

May react dangerously with: strong oxidants, strong acids.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

N-METHYL-2-PYRROLIDONE

Incompatible with: sulphur, carbon disulphide, oxidising substances, aluminium, metals. Incompatible materials: natural rubbers, plastic materials.

10.6. Hazardous decomposition products

N-METHYL-2-PYRROLIDONE

May develop: nitric oxide, carbon oxides.

11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available



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11. Toxicological information ... / >>

Information on likely routes of exposure

N-METHYL-2-PYRROLIDONE

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of environmental air.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

N-METHYL-2-PYRROLIDONE

There are no reported cases of acute or chronic intoxication or sensitisation. On volunteers, repeated skin applications caused modest and transient erythema. Oral and inhalation trials on mice and rats revealed no teratogenic effects at non embryotoxic doses. Not mutagenic in the Ames test.

Interactive effects

N-METHYL-2-PYRROLIDONE

The substance enhances the skin permeability of many other substances.

ACUTE TOXICITY

N-METHYL-2-PYRROLIDONE

LD50 (Oral)

4150 mg/kg

LD50 (Dermal)

> 5000 mg/kg Rat

LC50 (Inhalation)

> 5.1 mg/l/4h Rat

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

May damage fertility or the unborn child

STOT - SINGLE EXPOSURE

May cause respiratory irritation

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.



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12. Ecological information ... / >>

12.1. Toxicity

Information not available

12.2. Persistence and degradability

N-METHYL-2-PYRROLIDONE

Solubility in water 1000 - 10000 mg/l
Rapidly degradable

12.3. Bioaccumulative potential

N-METHYL-2-PYRROLIDONE

Partition coefficient: n-octanol/water -0.46

12.4. Mobility in soil

N-METHYL-2-PYRROLIDONE

Partition coefficient: soil/water 1.32

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available

13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable



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14. Transport information ... / >>

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

15. Regulatory information

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

Substances subject to the Rotterdam Convention:
None

Canadian Regulatory Information

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).

Safety Data Sheet according to WHMIS 2015.

16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

H360	May damage fertility or the unborn child.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CLP: EC Regulation 1272/2008
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PEL: Predicted exposure level
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- WHMIS: Workplace Hazardous Materials Information System.

GENERAL BIBLIOGRAPHY:

- GHS rev. 5
- The Merck Index. 10th Edition
- Handling Chemical Safety
- Niosh - Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

- Hazard Products Regulation (HPR)
- WHMIS 2015
- ONTARIO R.R.O. 1990, Regulation 883 (version July 2016)
- IARC website
- NTP. 2011. Report on Carcinogens, 12th Edition.
- OSHA website
- Cal/OSHA website



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- California Safe Drinking Water and Toxic Enforcement Act

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Product's classification is based on the criteria set out in Canada's Hazardous Products Regulations (HPR) (WHMIS 2015), unless otherwise indicated in sections 11 and 12.

The data for evaluation of chemical-physical properties are reported in section 9.