# Safety Data Sheet
# Pumaflex 32TX

## 1. Identification of the substance/mixture and of the company/undertaking

1.1 **Product identifier**

**Product name** PUMAFLEX 32TX

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

**Recommended Use** Sealant

1.3 **Details of the supplier of the safety data sheet**

**Supplier**

TQ3 North America
23 Commerce Rd. Unit A
Fairfield, NJ 07004
Phone: 973-882-7900
Fax: 973-882-7905
This telephone number is available during office hours only.

For further information, please contact: **info@tq-3.com**

1.4 **Emergency telephone number**

**Emergency telephone number**

Chemtrec: 1-800-424-9300 for US

+1 703-527-3887 outside US

## 2. Hazards identification

**2.1 Classification of the substance or mixture Flammable Liquid, 3**

| | |
|---|---|
| Skin corrosion/irritation | Category 2 - (H315) |
| Skin sensitization | Category 1 - |
| (H317) Specific target organ toxicity (single exposure) | Category 3 - |
| (H335) Chronic aquatic toxicity | Category 3 - |
| (H412) | |
| Flammable liquids | Category 2 - (H225) |

**2.2 Label elements**

***For the full text of the R-phrases mentioned in this Section, see Section 16***

**Signal Word: Danger**

**Hazard pictograms**

**Hazard Statements**
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H335 - May cause respiratory irritation
H412 - Harmful to aquatic life with long lasting effects
H225 - Highly flammable liquid and vapor

EUH208 - May produce an allergic reaction
**Precautionary Statements**
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
P273 - Avoid release to the environment
P243 - Take precautionary measures against static discharge
P271 - Use only outdoors or in a well-ventilated area
P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray

**Hazardous ingredients which must be listed on the label**

Contains METHYL METHACRYLATE

**Supplemental information**

**Other hazards**

No information available

## 3. Composition/Information on Ingredients

3.1 **Substances**

This product is a mixture. Health hazard information is based on its components

3.2 **Mixtures**

| Chemical Name | EC-No | CAS-No | Weight % | Classification (67/548/EEC) | Classification (1272/2008/EC) | REACH Registration Number |
|---|---|---|---|---|---|---|
| METHYL METHACRYLATE | 201-297-1 | 80-62-6 | 25 - 50 | F; R11<br>Xi; R37/38<br>R43 | STOT SE 3 (H335)<br>Skin Irrit. 2 (H315)<br>Skin Sens. 1 (H317)<br>Flam Liq. 2 (H225) | 01-2119452498-28-XXXX |
| DECANEDIOIC ACID ESTER | 255-437-1 | 41556-26-7 | < 1 | R43<br>N; R50 | Skin Sens. 1 (H317)<br>Aquatic Acute 1 (H400)<br>Aquatic Chronic 1 (H410) | 17-2119931815-34-XXXX |
| TRIETHYLENGLYCOL DIMETHACRYLATE | 203-652-6 | 109-16-0 | < 1 | R43 | Skin Sens. 1 (H317) | 01-2119969287-21-XXXX |

| | | | | | | |
|---|---|---|---|---|---|---|
| DODECANETHIOL | 203-984-1 | 112-55-0 | < 1 | Xi; R36/37/38<br>R53 | Skin Corr. 1C (H314)<br>Skin Sens. 1 (H317)<br>Aquatic Acute 1 (H400)<br>Aquatic Chronic 1 (H410) | 01-2119491318-31-XXXX |
| DECANEDIOIC ACID | 280-060-4 | 82919-37-7 | < 1 | R43<br>N; R50-53 | Skin Sens. 1 (H317)<br>Aquatic Acute 1 (H400)<br>Aquatic Chronic 1 (H410) | 05-2114346636-43-XXXX |
| 2-HYDROXYETHYL METHACRYLATE | 212-782-2 | 868-77-9 | < 1 | Xi; R36/38<br>R43 | Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)<br>Skin Sens. 1 (H317) | 01-2119490169-29-XXXX |
| 4-Methoxyphenol | 205-769-8 | 150-76-5 | < 0.1 | Xn; R22<br>Xi; R36<br>R43 | Acute Tox. 4 (H302)<br>Eye Irrit. 2 (H319)<br>Skin Sens. 1 (H317) | no data available |

**For the full text of the R-phrases mentioned in this Section, see Section 16**

**For the full text of the H-Statements mentioned in this Section, see Section 16.**

## 4. First Aid Measures

### Description of first-aid measures

**General Advice** Move out of dangerous area. Take off contaminated clothing immediately.

**Eye Contact** Remove contact lenses, if present. Rinse immediately with plenty of water, also under eyelids, for at least 15 minutes. Consult a physician.

**Skin Contact** Wash off immediately with soap and plenty of water. Remove all contaminated clothes and shoes. Call a physician if irritation develops or persists.

**Ingestion** Gently wipe or rinse the inside of the mouth with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention immediately.

**Inhalation** Move to fresh air. Keep respiratory tract clear. If unconscious place in recovery position and seek medical advise. If not breathing, give artificial respiration. Call a physician if irritation develops or persists.

4.1 **Most important symptoms and effects, both acute and delayed**

**Main Symptoms** No information available

4.2 **Indication of any immediate medical attention and special treatment needed**

**Notes to physician** Treat symptomatically

## 5. Fire-Fighting Measures

5.1 **Extinguishing media**

**Suitable extinguishing media**
Dry powder, Foam, Carbon dioxide ($CO_2$), Water mist.

**Extinguishing media which shall not be used for safety reasons**

High volume water jet.

5.2 **Special hazards arising from the substance or mixture**

Hazardous decomposition products formed under fire conditions. Flash back possible over considerable distance. Explosive reaction may occur on heating or burning. Burning produces irritant fumes.

5.3 **Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. Keep containers and surroundings cool with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## 6. Accidental Release Measures

6.1 **Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Remove all sources of ignition. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

6.2 **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system.

6.3 **Methods and materials for containment and cleaning up**

**Methods for Containment**
Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) andplacein container for disposal according to local / national regulations (see Section 13).

**Methods for cleaning up**
Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment.

6.4 **Reference to other sections**

See Section 12 for additional information.

## 7. Handling and storage

7.1 **Precautions for safe handling**

**Advice on safe handling**
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Provide exhaust ventilation close to floor level. Vapors are heavier than air and can cause suffocation by reducing oxygen available for breathing. Open drum carefully as content may be under pressure. Use only in well-ventilated areas. Vapors may form explosive mixtures with air. Keep product and empty container away from heat and sources of ignition. Take measures to prevent the build up of electrostatic charge. Do not use sparking tools. Use only explosion-proof equipment. Have fire extinguishers ready before opening the drum.

7.2 **Conditions for safe storage, including any incompatibilities**

**Technical measures/Storage conditions**
Store in original container. Never fill containers more than 80 % because aerial oxygen is necessary for stabilising. Storebetween 41 and 77 °F (5 - 25° C) in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Keep in anarea equipped with solvent resistant flooring. Do not store together with oxidizing and self-igniting products.

7.3 **Specific end uses**

**Specific use(s)**
No information available

**Exposure scenario**
No information available

## 8. Exposure Controls/Personal Protection

8.1 **Control parameters**

**Exposure Limit Values** .

| Chemical Name | European Union | Austria | Belgium | Denmark | Finland | France |
|---|---|---|---|---|---|---|
| METHYL METHACRYLATE 80-62-6 | | STEL 100 ppm<br>STEL 420 mg/m³<br>TWA: 50 ppm<br>TWA: 210 mg/m³ | TWA: 50 ppm<br>TWA: 208 mg/m³<br>STEL: 100 ppm<br>STEL: 416 mg/m³ | TWA: 25 ppm<br>TWA: 102 mg/m³<br>Skin | TWA: 10 ppm<br>TWA: 42 mg/m³<br>STEL: 50 ppm<br>STEL: 210 mg/m³ | TWA: 50 ppm<br>TWA: 205 mg/m³<br>STEL: 100 ppm<br>STEL: 410 mg/m³ |
| **Chemical Name** | **Germany** | **Iceland** | **Ireland** | **Italy** | **Luxembourg** | **The Netherlands** |
| METHYL METHACRYLATE 80-62-6 | TWA: 50 ppm<br>TWA: 210 mg/m³ | TWA: 50 ppm<br>S*<br>Ceiling: 100 ppm<br>STEL: 100 ppm | TWA: 50 ppm<br>STEL: 100 ppm | STEL: 100 ppm<br>STEL: 410 mg/m³<br>TWA: 50 ppm<br>TWA: 205 mg/m³ | STEL: 100 ppm<br>TWA: 50 ppm | STEL: 410 mg/m³<br>TWA: 205 mg/m³ |
| **Chemical Name** | **Norway** | **Portugal** | **Spain** | **Sweden** | **Switzerland** | **The United Kingdom** |
| METHYL METHACRYLATE 80-62-6 | TWA: 25 ppm<br>TWA: 100 mg/m³<br>Skin<br>STEL: 100 ppm<br>STEL: 400 mg/m³ | STEL: 100 ppm<br>TWA: 50 ppm | STEL: 100 ppm<br>TWA: 50 ppm | LLV: 50 ppm<br>LLV: 200 mg/m³<br>S*<br>STV: 150 ppm<br>STV: 600 mg/m³ | STEL: 100 ppm<br>STEL: 420 mg/m³<br>TWA: 50 ppm<br>TWA: 210 mg/m³ | STEL: 100 ppm<br>STEL: 416 mg/m³<br>TWA: 50 ppm<br>TWA: 208 mg/m³ |
| 2-HYDROXYETHYL METHACRYLATE 868-77-9 | TWA: 2 ppm<br>TWA: 11 mg/m³<br>STEL: 4 ppm<br>STEL: 16.5 mg/m³ | | | | | |

TWA: Time weighted average
STEL: Short term exposure limit
LLV: Level Limit Value
STV: Short Term Value

**Derived No Effect Level (DNEL)** No information available

**Predicted No Effect Concentration (PNEC)** No information available

8.2 **Exposure controls**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment**

**Eye/Face Protection** Tightly fitting safety goggles. Eye wash bottle with pure water

**Hand Protection** Solvent-resistant gloves. Suitable material: butyl-rubber. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Follow the skin protection plan.

**Skin & body protection** Follow the skin protection plan. Flame retardant antistatic protective clothing. Remove and wash contaminated clothing before re-use.

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Preferably a compressed airline breathing apparatus.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke. Keep away from food, drink and animal feedingstuffs. Keep working clothes separately.

**Environmental Exposure Controls** Prevent product from entering drains. Do not allow material to contaminate ground water system.

## 9. Physical and chemical properties

9.1 **Information on basic physical and chemical properties**

| | |
|---|---|
| **Physical state** | Liquid |
| **Color** | pigmented |
| **Odor** | like acrylic |
| **Odor Threshold** | 0.05 ppm |

| **Property** | **Values** | |
|---|---|---|
| **pH** | Not Applicable | |
| **Boiling point/boiling range** | 100.3 °C (MMA) / 213 °F | |
| **Flash Point** | 11.5 °C (MMA) / 53 °F | |
| **Explosion Limits** | | |
| **upper** | 12.5 Vol.% (MMA) | |
| **lower** | 2.1 Vol.% (MMA) | |
| **Vapor pressure** | 38.7 mbar (MMA) | (Air = 1.0) |
| **Vapor density** | Not Applicable | |
| **Relative density** | Not Applicable | |
| **Water solubility** | insoluble | |
| **Partition coefficient: n-octanol/water** | 1.38 log POW (MMA) | |
| **Viscosity, kinematic** | 490 - 700 mPa.s (25 °C) | |
| **Explosive properties** | Not Applicable | |
| **Evaporation rate** | Not Applicable | |

9.2 **Other information**

| | |
|---|---|
| **Volatile organic compounds (VOC) content** | Not Applicable |
| **Density** | 1.36 g/cm³ (25 °C) |
| **Bulk Density** | Not Applicable |
| **Melting/freezing point** | -48 °C (MMA) / -54 °F |
| **Autoignition temperature** | |

## 10. Stability and Reactivity

10.1 **Reactivity**

Stable under normal conditions.

10.2 **Chemical stability**

Stable under normal conditions.

10.3 **Possibility of hazardous reactions**

**Hazardous Polymerization**
Polymerization occurs when exposed to white light, ultraviolet light or heat. Polymerization is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers.

10.4 **Conditions to Avoid**

Heat, flames and sparks. Exposure to sunlight.

10.5 **Incompatible Materials**

Avoid radical-forming starting agents, peroxides and reactive metals. Amines. Heavy metal compounds. Oxidizingagents. Reducing agents.

10.6 **Hazardous Decomposition Products**

No hazardous decomposition products are known.

## 11. Toxicological information

**11.1 Information on toxicological effects**

**Acute toxicity**

**Product Information** .

**Inhalation** Irritating to respiratory system. Irritating to mucous membranes.

**Eye contact** There are no data available for this product.

**Skin contact** Irritating to skin. May cause sensitization by skin contact.

**Ingestion** There are no data available for this product.

**Component Information**

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| METHYL METHACRYLATE | > 5000 mg/kg (Rat) | > 5000 mg/kg ( Rabbit ) | 4632 ppm ( Rat ) 4 h |

**Chronic toxicity** No information available.

**Skin corrosion/irritation** Irritating to skin.

**Respiratory or skin sensitization** May cause sensitization by skin contact.

**Germ Cell Mutagenicity** No information available.

**Reproductive toxicity** No information available.

**Specific target organ systemic toxicity (single exposure)** No information available.

**Specific target organ systemic toxicity (repeated exposure)** No information available.

**Aspiration hazard** No information available

**Carcinogenicity** No information available.

## 12. Ecological information

12.1 **Toxicity**

**Ecotoxicity effects** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. .

| Chemical Name | Toxicity to algae | Toxicity to fish | Toxicity to daphnia and other aquatic invertebrates |
|---|---|---|---|
| METHYL METHACRYLATE | EC50: 96 h Pseudokirchneriella subcapitata 170 mg/L | LC50: 96 h Pimephales promelas 243 - 275 mg/L flow-through LC50: 96 h Pimephales promelas 125.5 - 190.7 mg/L static LC50: 96 h Lepomis macrochirus 170 - 206 mg/L flow-through LC50: 96 h Lepomis macrochirus 153.9 - 341.8 mg/L static LC50: 96 h Oncorhynchus mykiss 79 mg/L | EC50: 48 h Daphnia magna 69 mg/L |

| | | | |
|---|---|---|---|
| | | flow-through LC50: 96 h Oncorhynchus mykiss 79 mg/L static LC50: 96 h Poecilia reticulata 326.4 - 426.9 mg/L static | |
| DECANEDIOIC ACID ESTER | | LC50: 96 h Lepomis macrochirus 0.97 mg/L static | |
| 2-HYDROXYETHYL METHACRYLATE | | LC50: 96 h Pimephales promelas 213 - 242 mg/L flow-through LC50: 96 h Pimephales promelas 227 mg/L | |
| 4-Methoxyphenol | | LC50: 96 h Pimephales promelas 84.3 mg/L flow-through LC50: 96 h Oncorhynchus mykiss 28.5 mg/L flow-through | |

12.2 **Persistence and degradability**

Partially biodegradable.

12.3 **Bioaccumulative potential**

No data are available on the product itself.

| Chemical Name | log Pow |
|---|---|
| METHYL METHACRYLATE | 0.7 |
| DECANEDIOIC ACID ESTER | 0.37 |
| 2-HYDROXYETHYL METHACRYLATE | 0.47 |
| 4-Methoxyphenol | 1.34 |

12.4 **Mobility in soil**

No data is available on the product itself.

12.5 **Results of PBT and vPvB assessment**

No information available

12.6 **Other adverse effects.**

No information available

## 13. Disposal Considerations

**13.1 Waste treatment methods**

**Waste from residues / unused products**
Dispose of as hazardous waste in compliance with local and national regulations. - waste paint and varnish containing organic solvents or other dangerous substances.

**Contaminated packaging**
Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not burn, or use a cutting torch on, the empty drum. Waste CodE - packaging containing residues of or contaminated by dangeroussubstances.

**Other information**

## 14. Transport Information

Reactive Flammable Material.

**ADR**

| | |
|---|---|
| **UN Number** | 1866 |
| **Proper shipping name** | 1866 - Resin solution |
| **Hazard class** | 3 |
| **Packing Group** | II |
| **Tunnel Restriction Code** | D/E |
| **ADR/RID-Labels** | 3 |
| **Hazard identification No** | 33 |

**IMDG**

| | |
|---|---|
| **UN Number** | 1866 |
| **Proper shipping name** | 1866 - Resin solution |
| **Hazard class** | 3 |
| **Packing Group** | II |
| **Marine pollutant** | No |
| **EmS No.** | F-E, S-E |

**IATA**

| | |
|---|---|
| **UN Number** | 1866 |
| **Proper shipping name** | 1866 - Resin solution |
| **Hazard class** | 3 |
| **Packing Group** | II |

## 15. Regulatory information

15.1 **Safety, health and environmental regulations/legislation specific for the substance or mixture National regulatory information**

| Chemical Name | French RG number |
|---|---|
| METHYL METHACRYLATE | RG 65,RG 82 |
| 2-HYDROXYETHYL METHACRYLATE | RG 65 |
| 4-Methoxyphenol | RG 65 |

**International Inventories**

| | |
|---|---|
| **TSCA** | Complies |
| **EINECS/ELINCS** | - |
| **DSL** | - |
| **PICCS** | - |
| **ENCS** | - |
| **IECSC** | Complies |
| **AICS** | Complies |
| **KECL** | - |

**Legend**
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

15.2 **Chemical Safety Assessment**

No information availablle

## 16. Other information

**Full text of R-phrases referred to under sections 2 and 3**
R11 - Highly flammable
R43 - May cause sensitization by skin contact
R50 - Very toxic to aquatic organisms
R53 - May cause long-term adverse effects in the aquatic environment
R37/38 - Irritating to respiratory system and skin
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R36/38 - Irritating to eyes and skin
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**Full text of H-Statements referred to under section 3**
H317 - May cause an allergic skin reaction
H314 - Causes severe skin burns and eye damage
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H335 - May cause respiratory irritation
H315 - Causes skin irritation
H225 - Highly flammable liquid and vapor
H319 - Causes serious eye irritation

**Legal disclaimer:**

**TQ3 urges each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the printed date. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincialor local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific SDS's, we are not and cannot be responsible for MSDS's obtained from any source other than ourselves. If you have obtained an MSDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.**

| | |
|---|---|
| **Prepared By** | TQ3 North America, Inc. |
| **Revision Date** | 7/13/2015 |
| **Revision Note** | Not Applicable |

**End of Safety Data Sheet**