

SAFETY DATA SHEET

1. Identification

Material name: TPA LV SINGLE PLY BONDING ADHESIVE 5 GL
Material: 505410 805

Recommended use and restriction on use

Recommended use: Coatings
Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

WATERPROOFING TECHNOLOGIES INC.
3735 Green road
CLEVELAND OH 44124
US

Contact person: EH&S Department
Telephone:
Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids Category 2

Health Hazards

Toxic to reproduction Category 2

Unknown toxicity - Health

| | |
|--|-------|
| Acute toxicity, oral | 0 % |
| Acute toxicity, dermal | 1 % |
| Acute toxicity, inhalation, vapor | 98 % |
| Acute toxicity, inhalation, dust or mist | 100 % |

Unknown toxicity - Environment

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|--|-------|
| Acute hazards to the aquatic environment | 26 % |
| Chronic hazards to the aquatic environment | 100 % |

Label Elements

Hazard Symbol:



Signal Word: Danger

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|---|--|
| Hazard Statement: | Highly flammable liquid and vapor. Suspected of damaging fertility or the unborn child. |
| Precautionary Statement: | |
| Prevention: | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. |
| Response: | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If exposed or concerned: Get medical advice/attention. In case of fire: Use ... to extinguish. |
| Storage: | Store in well-ventilated place. Keep cool. Store locked up. |
| Disposal: | Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. |
| Other hazards which do not result in GHS classification: | Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion. |

3. Composition/information on ingredients

Mixtures

| Chemical Identity | CAS number | Content in percent (%)* |
|---------------------|------------|-------------------------|
| Acetone | 67-64-1 | 60 - 100% |
| Methyl ethyl ketone | 78-93-3 | 3 - 7% |
| Toluene | 108-88-3 | 1 - 5% |

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

| | |
|----------------------|---|
| Ingestion: | Call a POISON CENTER/doctor/.../if you feel unwell. Rinse mouth. |
| Inhalation: | Move to fresh air. |
| Skin Contact: | Take off immediately all contaminated clothing. Wash skin thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention. |
| Eye contact: | Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention. |

Most important symptoms/effects, acute and delayed

| | |
|------------------|-------------------------------|
| Symptoms: | Respiratory tract irritation. |
|------------------|-------------------------------|

Indication of immediate medical attention and special treatment needed

Treatment: Get medical attention if symptoms occur.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards arising from the chemical: Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind.

Methods and material for containment and cleaning up: Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Take precautionary measures against static discharges. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities: Store in a well-ventilated place. Store in a cool place. Store locked up.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

| Chemical Identity | type | Exposure Limit Values | Source |
|---------------------|-----------|----------------------------|---|
| Acetone | TWA | 500 ppm | US. ACGIH Threshold Limit Values (2011) |
| | STEL | 750 ppm | US. ACGIH Threshold Limit Values (2011) |
| | PEL | 1,000 ppm 2,400 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Methyl ethyl ketone | TWA | 200 ppm | US. ACGIH Threshold Limit Values (2011) |
| | STEL | 300 ppm | US. ACGIH Threshold Limit Values (2011) |
| | PEL | 200 ppm 590 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Toluene | TWA | 20 ppm | US. ACGIH Threshold Limit Values (2011) |
| | TWA | 200 ppm | US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006) |
| | Ceiling | 300 ppm | US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006) |
| | MAX. CONC | 500 ppm | US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006) |

| Chemical name | type | Exposure Limit Values | Source |
|---------------|------|-----------------------|---|
| Acetone | STEL | 500 ppm | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | TWA | 250 ppm | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |

| | | | | |
|---------------------|-------|-----------|-------------|---|
| Acetone | TWAEV | 500 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| | STEL | 750 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Acetone | STEL | 1,000 ppm | 2,380 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| | TWA | 500 ppm | 1,190 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| Methyl ethyl ketone | TWA | 50 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | STEL | 100 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Methyl ethyl ketone | TWAEV | 200 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| | STEL | 300 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Methyl ethyl ketone | TWA | 50 ppm | 150 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| | STEL | 100 ppm | 300 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| Toluene | TWA | 20 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Toluene | TWAEV | 20 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Toluene | TWA | 50 ppm | 188 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |

Biological Limit Values

| Chemical Identity | Exposure Limit Values | Source |
|--|-----------------------|---------------------|
| Acetone (acetone: Sampling time: End of | 50 mg/l (Urine) | ACGIH BEL (03 2013) |

| | | |
|---|--------------------------------|---------------------|
| shift.) | | |
| Methyl ethyl ketone (MEK: Sampling time: End of shift.) | 2 mg/l (Urine) | ACGIH BEL (03 2013) |
| Toluene (o-Cresol, with hydrolysis: Sampling time: End of shift.) | 0.3 mg/g (Creatinine in urine) | ACGIH BEL (03 2013) |
| Toluene (toluene: Sampling time: Prior to last shift of work week.) | 0.02 mg/l (Blood) | ACGIH BEL (03 2013) |
| Toluene (toluene: Sampling time: End of shift.) | 0.03 mg/l (Urine) | ACGIH BEL (03 2013) |

Appropriate Engineering Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

General information:

Use explosion-proof ventilation equipment. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eye/face protection:

Wear goggles/face shield.

Skin Protection

Hand Protection:

Use suitable protective gloves if risk of skin contact.

Other:

No data available.

Respiratory Protection:

In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Hygiene measures:

When using do not smoke. Observe good industrial hygiene practices. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

9. Physical and chemical properties

Appearance

Physical state:

liquid

Form:

liquid

Color:

Amber

Odor:

Mild petroleum/solvent

Odor threshold:

No data available.

pH:

No data available.

Melting point/freezing point:

No data available.

Initial boiling point and boiling range:

56 °C 133 °F

Flash Point:

< -18 °C < 0 °F

Evaporation rate:

Slower than Ether

| | |
|--|---|
| Flammability (solid, gas): | No |
| Upper/lower limit on flammability or explosive limits | |
| Flammability limit - upper (%): | No data available. |
| Flammability limit - lower (%): | No data available. |
| Explosive limit - upper (%): | No data available. |
| Explosive limit - lower (%): | No data available. |
| Vapor pressure: | No data available. |
| Vapor density: | Vapors are heavier than air and may travel along the floor and in the bottom of containers. |
| Relative density: | 0.85 |
| Solubility(ies) | |
| Solubility in water: | Practically Insoluble |
| Solubility (other): | No data available. |
| Partition coefficient (n-octanol/water): | No data available. |
| Auto-ignition temperature: | No data available. |
| Decomposition temperature: | No data available. |
| Viscosity: | No data available. |

10. Stability and reactivity

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|--|--|
| Reactivity: | No data available. |
| Chemical Stability: | Material is stable under normal conditions. |
| Possibility of Hazardous Reactions: | No data available. |
| Conditions to Avoid: | Heat, sparks, flames. |
| Incompatible Materials: | Strong acids. Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). Strong bases. |
| Hazardous Decomposition Products: | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. |

11. Toxicological information

Information on likely routes of exposure

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|----------------------|---|
| Ingestion: | May be ingested by accident. Ingestion may cause irritation and malaise. |
| Inhalation: | In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes. |
| Skin Contact: | Causes mild skin irritation. |
| Eye contact: | Eye contact is possible and should be avoided. |

Information on toxicological effects**Acute toxicity (list all possible routes of exposure)**

Oral
Product: ATEmix: 45,081.33 mg/kg

Dermal
Product: No data available.

Inhalation
Product: No data available.

Repeated dose toxicity
Product: No data available.

Skin Corrosion/Irritation
Product: No data available.

Serious Eye Damage/Eye Irritation
Product: No data available.

Specified substance(s):

| | |
|---------------------|--|
| Acetone | in vivo (Rabbit, 24 hrs): Minimum grade of severe eye irritant |
| Methyl ethyl ketone | in vivo (Rabbit, 24 hrs): Category 2 |
| Toluene | in vivo (Rabbit, 24 - 72 hrs): Not irritating |

Respiratory or Skin Sensitization
Product: No data available.

Carcinogenicity
Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):
No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity

Product: Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

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|-----------------------------------|
| 12. Ecological information |
|-----------------------------------|

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Acetone LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 5,490 - 7,030 mg/l Mortality

Methyl ethyl ketone LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 3,130 - 3,320 mg/l Mortality

Toluene LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 71.7 - 82.8 mg/l Mortality

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Acetone LC 50 (Water flea (*Daphnia magna*), 24 h): 10 mg/l Mortality
EC 50 (Water flea (*Daphnia magna*), 48 h): 21,600 - 23,900 mg/l Intoxication
LC 50 (Scud (*Gammarus fasciatus*), 96 h): > 100 mg/l Mortality
LC 50 (Asiatic clam (*Corbicula manilensis*), 96 h): > 20,000 mg/l Mortality
LC 50 (Water flea (*Daphnia magna*), 96 h): > 100 mg/l Mortality

Methyl ethyl ketone LC 50 (Water flea (*Daphnia magna*), 24 h): 8,890 mg/l Mortality

LC 50 (Water flea (Daphnia magna), 48 h): > 520 mg/l Mortality
LC 50 (Opossum shrimp (Americamysis bahia), 96 h): > 402 mg/l Mortality
LC 50 (Water flea (Daphnia magna), 24 h): > 520 mg/l Mortality

Toluene LC 50 (Water flea (Daphnia magna), 24 h): 240 - 420 mg/l Mortality
EC 50 (Water flea (Daphnia magna), 48 h): < 9.83 mg/l Intoxication

Chronic hazards to the aquatic environment:**Fish**

Product: No data available.

Specified substance(s):

Toluene NOAEL (Pimephales promelas, 32 d): 4 mg/l experimental result

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability**Biodegradation**

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative Potential**Bioconcentration Factor (BCF)**

Product: No data available.

Specified substance(s):

Toluene Green algae (Selenastrum capricornutum), Bioconcentration Factor (BCF): 3,016 (Static)

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

Acetone Log Kow: -0.24

Methyl ethyl ketone Log Kow: 0.29

Toluene Log Kow: 2.73

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information**TDG:**

UN1133, ADHESIVES, 3, PG II

CFR / DOT:

UN1133, Adhesives, 3, PG II

IMDG:

UN1133, ADHESIVES, 3, PG II

Further Information:

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

15. Regulatory information**US Federal Regulations****TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|--------------------------|---|
| P-chlorobenzotrifluoride | De minimis concentration: 1.0% One-Time Export Notification only. |

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|--------------------------|----------------------------|
| Acetone | 5000 lbs. |
| Methyl ethyl ketone | 5000 lbs. |
| Toluene | 1000 lbs. |

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories**

Fire Hazard
Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|--------------------------|----------------------------|
| Acetone | 5000 lbs. |
| Methyl ethyl ketone | 5000 lbs. |
| Toluene | 1000 lbs. |

SARA 311/312 Hazardous Chemical

| <u>Chemical Identity</u> | <u>Threshold Planning Quantity</u> |
|--------------------------|------------------------------------|
| Acetone | 500 lbs |
| Methyl ethyl ketone | 500 lbs |
| Toluene | 500 lbs |

SARA 313 (TRI Reporting)

| <u>Chemical Identity</u> |
|--------------------------|
| Toluene |

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

US. New Jersey Worker and Community Right-to-Know Act

| <u>Chemical Identity</u> |
|--------------------------|
| Acetone |
| Methyl ethyl ketone |
| Toluene |

US. Massachusetts RTK - Substance List

| <u>Chemical Identity</u> |
|--------------------------|
| Acetone |
| Methyl ethyl ketone |
| Toluene |

US. Pennsylvania RTK - Hazardous Substances

| <u>Chemical Identity</u> |
|--------------------------|
| Acetone |
| Methyl ethyl ketone |
| Toluene |

US. Rhode Island RTK

| <u>Chemical Identity</u> |
|--------------------------|
| Acetone |
| Methyl ethyl ketone |
| Toluene |

Other Regulations:

Regulatory VOC (less water and exempt solvent): 199 g/l

VOC Method 310: 5.80 %**Inventory Status:**

| | |
|--|--|
| Australia AICS: | One or more components in this product are not listed on or exempt from the Inventory. |
| Canada DSL Inventory List: | All components in this product are listed on or exempt from the Inventory. |
| EINECS, ELINCS or NLP: | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan (ENCS) List: | One or more components in this product are not listed on or exempt from the Inventory. |
| China Inv. Existing Chemical Substances: | One or more components in this product are not listed on or exempt from the Inventory. |
| Korea Existing Chemicals Inv. (KECI): | One or more components in this product are not listed on or exempt from the Inventory. |
| Canada NDSL Inventory: | One or more components in this product are not listed on or exempt from the Inventory. |
| Philippines PICCS: | One or more components in this product are not listed on or exempt from the Inventory. |
| US TSCA Inventory: | All components in this product are listed on or exempt from the Inventory. |
| New Zealand Inventory of Chemicals: | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan ISHL Listing: | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan Pharmacopoeia Listing: | One or more components in this product are not listed on or exempt from the Inventory. |

16. Other information, including date of preparation or last revision

| | |
|-----------------------------|--------------------|
| Revision Date: | 07/30/2015 |
| Version #: | 1.0 |
| Further Information: | No data available. |

Disclaimer:

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.